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The Railroad Man's Magazine

COMPLETE INDEX

FOR

VOLUME XIII

October, 1910, to January, 1911

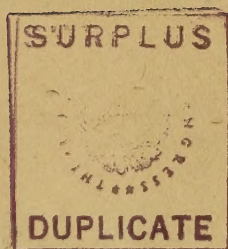
NEW YORK

THE FRANK A. MUNSEY CO., PUBLISHERS

175 FIFTH AVENUE

1911





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THE RAILROAD MAN'S MAGAZINE



OCTOBER

THE FRANK A. MUNSEY COMPANY NEW YORK AND LONDON

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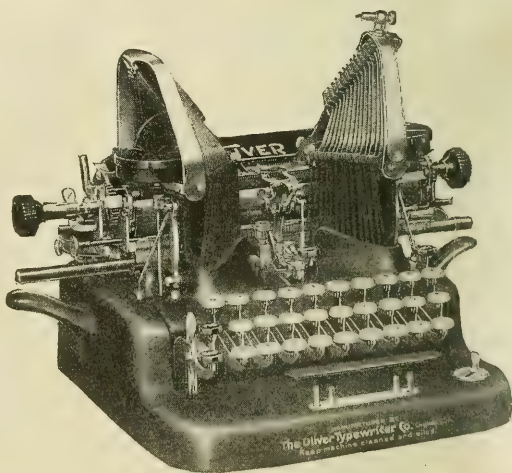
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ISSUED MONTHLY BY THE FRANK A. MUNSEY COMPANY.
175 Fifth Avenue, New York, and Temple House, Temple Avenue, E. C., London

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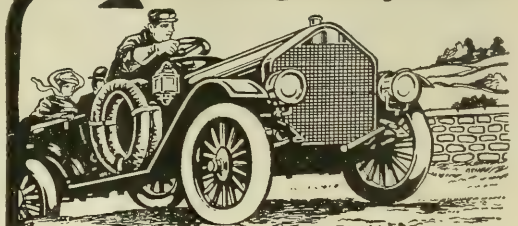
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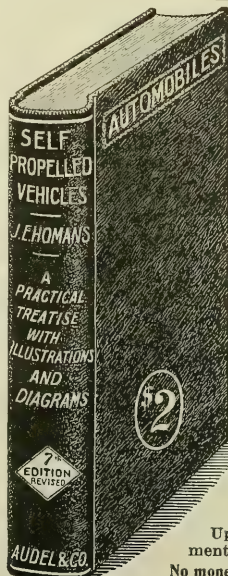
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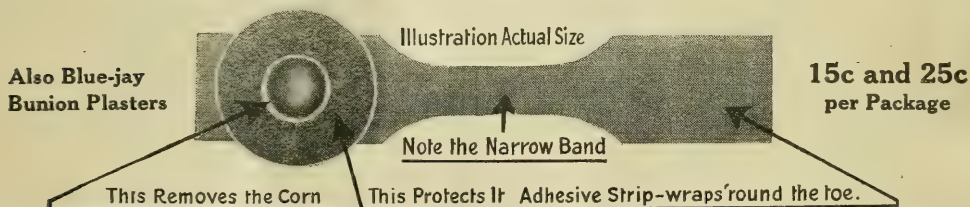
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THE RAILROAD MAN'S MAGAZINE

Vol. XIII.

OCTOBER, 1910.

No. 1.

Our Fourth Mile-Post.

The Train-Sheets of Our Successful Run of the Past Year, Which Has Ended Without a Hot Box or a Loose Joint—And the Old Hog Is Panting for the Next Division, Our String of Cars Is as New as the Day it Left the Shop, the Con Has Given the High-Ball—She Is Off Again and Hot for the Hill.

BY THE EDITOR



COMPLETING his first four years of continuous service, no matter how indifferently it may appeal to the average layman as merely a certain measure of time, is, to the railroader, a period replete with much significance, because it tells unerringly whether success or failure has attended his effort in his chosen line. It is the time associated with the duration of all apprenticeships to the many and varied trades—machinists, boiler-makers, molders, pattern-makers, and others—which necessity, through development, has gradually incorporated into the conduct of the iron trail. It represents the time which a brakeman must serve before running his own train, and serves to define the length of a fireman's endeavor before the coveted position is attained on the right side of the cab.

To successfully round up these four years is to pass from the experimental to the possible stage—from chimera to reality; and, because fact has supplanted fancy, a tangible basis is evolved for general groundwork in the future. The presentation of an apprenticeship certificate by the master mechanic to an embryo machinist implies the conces-

sion on the part of the railroad company that the recipient has learned his business—or, at least, if he has not thoroughly learned it, he is still safe to be entrusted with its conduct. It means that, while before the apprentice had largely speculation for a basis, he is now familiar with what is wanted, and it is up to him to apply his lessons.

THE RAILROAD MAN'S MAGAZINE, which with this number passes its fourth milestone, is impressed by the mark which the above lapse of time affords to its own history. It points with pride to the fact that it, too, has served an apprenticeship—a four-year apprenticeship in which it has tried to learn the trade of appreciating just what its readers want between its covers.

We say that it has tried to do this, because in the stirring business which it chronicles, where something new or progressive crops out every day, it would be absurd to assert that it has thoroughly learned its trade as yet, and this notwithstanding the grateful fact that you, boys, have given us our apprenticeship certificate on approval, in the shape of a patronage which, in magnitude, has probably never before fallen to the lot of a magazine just four years old.



ROBERT H. ROGERS,

AUTHOR OF MANY ARTICLES OF TECHNICAL VALUE,
INCLUDING THE "ROGERS GROUP" FOR
BEGINNERS.

Photograph by Kemp, Paterson, New Jersey.

When this magazine was founded the field defined by its name was recognized as practically limitless, and past experience had well indicated the appreciation among all classes of magazine readers for a good railroad story.

It was realized that the very best of these were yet to be unearthed—that they were scattered throughout the length and breadth of the land, in lonely signal-towers, terminal-yards, office-buildings, and bustling round-houses—and that every ramification of the railroad, no matter how apparently insignificant, embodied some local incident which, with the proper treatment, must be of universal interest.

Disregarding pure fiction for the moment, we believe that the fund of true stories is inexhaustible. We refer to the stories of railroad life that are heard after the day's work is done, but which so seldom see print, because the narrators have neither the time, in-

clination, nor, possibly, the training. It was to secure these, and the associated features which combine in the real drama of the road, that Gilson Willets was put on the trail in October, 1906. It was an assignment daring in conception, as the magazine was then an unknown and untried quantity. It was the first time that a magazine writer had ever gone among railroad men for stories.

Since his first trip over the Union Pacific, and part of the Southern Pacific, Mr. Willets has made three similar journeys. He has traveled thirty-six thousand miles on the railroads of this country, more than enough to encircle the globe. He has written from the last eastern extremity at Cape Cod, through the northern boundary via the Great Lakes and Chicago to Puget Sound, and from Los Angeles, and the desert country, through the South to the national capital. He secured some of the best stories of human



THADDEUS S. DAYTON,

WHO HAS TOLD US OF THE MYSTERIOUS INSIDE
WORKINGS OF THE BUSINESS END OF
RAILROADS.

Photograph by Schlattman Hermanos, Mexico.

nature, daring heroism, love, comedy, and tragedy that were ever published—and the railroad embodies all these elements of life.

We have mentioned Mr. Willets thus prominently because, more than any man we know, he has unearthed the human side of our great railroads. He possesses the justly envied faculty of making friends. He knows how to get a story, and—he knows how to tell it. His future work in this connection will, no doubt, be lighter than in the past, because through the slogan, "Watch for Willets!" the railroad men are always ready to meet him. They have seen and enjoyed the fruits of his earlier trips; they understand his mission, and they know that their confidence has not been misplaced.

One of our most popular features has been the True Story Series. We asked your help to make these stories possible, as we believed, and still believe, that every incumbent of a



J. E. SMITH.

ONE OF THE KEENEST RAILROAD HUMORISTS.
AUTHOR OF "THE OBSERVATIONS OF
A COUNTRY STATION-AGENT."

Photograph by Hunt, Gas City, Indiana.

railroad position, no matter how humble he may be, can recall a personal experience or an incident out of the ordinary which would make splendid reading because it is true.

The only stipulation was that it must be authentic, and proof against any question which we might ask the railroad company or the persons written about. That the response has been noble is evinced by the fact that this October, 1910, issue contains True Story No. 49—forty-nine stories of unusual interest, which, we venture to say, would have remained largely untold had it not been for THE RAILROAD MAN'S MAGAZINE. And there are hundreds more which have never come to our office. But the good ones will come.

Mr. Willets's campaigns and the True Story Series effectually portrayed the human interest side of the railroad, but they have



CHARLES FREDERICK CARTER.

AN OLD-TIME RAILROAD MAN WHOSE ARTICLES ARE
AS INTERESTING AS THEY ARE ACCURATE.

Photograph by Gardner & Co., Brooklyn, New York.

not dimmed our fiction—our stories of railroad life in all its phases, from the frozen fingers of the humblest "ham" to the financial concerns of the president.

After the first number appeared, we were in receipt of many letters in which we were besieged with many requests for real railroad fiction—not true stories, or even stories based on fact, but for the Simon-pure article without which no magazine can possibly exist.

Engineers wrote us for fiction stories of their always romantic profession; the fireman wished his progressive calling to be exploited; telegraph operators clamored for a recognition of their important end of it, and even the baggage-smasher of humorous fancy was averse to being forgotten.

We called on old and tried writers, and have developed many new ones to supply us with our fiction. Cy Warman, J. R. Stafford, and F. H. Richardson have sat on the

right side of the cab in their day. Augustus Wittfield, he of the Monk Hausen and Carlock Bjones yarns, is a Philadelphia printer, and never wrote before this magazine inspired him. John C. Russell, that nomadic soldier of fortune; Robert Fulkerson Hoffman, who has also served as a railroad man, Charles Wesley Sanders, C. W. Beels, Robert F. Creel, Frank Condon, Horace H. Herr, Katharine Eggleston, and the others, who we do not slight by omitting their names, have furnished us with some of the most readable stories ever given to the American public, in which the life and atmosphere of the railroad man have been depicted with unerring touches. And when it comes to humor, it must be a weak-minded, vinegar-blooded man who can't chuckle till he aches over the Honk and Horace stories by Emmet F. Harte.

These writers have created a new school in story-telling which we will term the fiction of the railroad. The creations of these writers, although often broadly drawn, as fictitious characters must be under certain treatment, were nevertheless of distinctively human aspect; they reminded one of the pleasanter side of business, and they were the fellows you liked to meet after the day was in, no matter what their peculiarities may have been.

The short story is a vital problem in the making of any magazine, but it has been a particularly hard task in connection with this publication, due to the fact that its audience is naturally the most critical in the world.

Our fiction readers are active men of the rail, who want good, enlivening stories of their various occupations; but they are quick to resent a technical inaccuracy.

The old-school fiction, wherein the lever is reversed, and the eagle eye blows for brakes, could have no place in THE RAILROAD MAN'S MAGAZINE. It would simply imply that the book would be thrown aside in pardonable disgust, regardless of the literary excellence of the effort.

We want to remind you of the many and varied serials with which you have been entertained. For these at least we have no apology to offer, and no recriminations for ourselves. William S. Wright, John Wellsley Sanders, George Van Schaick, J. Aubrey Tyson, and Horace Herr have furnished some thrilling yarns—and they are going to furnish some more.

Some of them may not have possessed the distinctive flavor of the railroad, but the majority were connected therewith; and it



GILSON WILLETS,

WHO HAS ALREADY TRAVELED OVER 36,000 MILES
TO SECURE THE STORIES OF RAILROAD
MEN FIRST-HAND.

is pleasing to recall that many have survived in the more enduring book-form since you first made their acquaintance in these pages. We have been truly fortunate in this rather elaborate form of fiction in securing the work of trained writers who possess the additional qualification of being sufficiently versed in the basic principles of railroading to present the incidents with realism and fidelity to fact.

However, it was never intended to make THE RAILROAD MAN'S MAGAZINE a mere story-book, any more than to have it strictly informative and technical. We knew long before October, 1906, that railroads in general had been but lightly touched upon in the special article, the basis of which is necessarily informative, and that employees of all grades were eagerly awaiting the history of the great American railroads.

That is why we started with the very first number to tell you the real facts of the builders' lives; of their struggles during the formation of these enduring monuments to superhuman endeavor, and of the romance that is associated with enterprises so great and so diversified.

Space limitations of this talk forbid more than a mention of how thoroughly the magazine has covered this ground in the past four years; but it is no more than fair to the efforts of our contributors, and our own, as well, to recall the great American Train-Robberies Series, which ran through fourteen numbers; the histories of the railroads, in which you read the history of the famous old Erie, with its mosaic of ever-changing administrations; of the Baltimore and Ohio, the real pioneer of the trunk-lines; and of the great Pennsylvania, which so proudly lays claim to be the standard railroad of America.

Other stories in this entertaining series told you how the Union Pacific united the ends of the continent; how the Santa Fe conquered the desert; of the varied career of the New York Central; and of the Titanic struggle which pushed the Canadian Pacific from ocean to ocean.

These articles, which subsequently appeared in book-form under the title "When Railroads Were New," were written by C. F. Carter, who has contributed many additional articles of historical and biographical importance. In the latter connection we wish to particularly specify Mr. Carter's series entitled "Men Who Have Made Travel Safe," undoubtedly the most important addition to the railroad literature of the coun-

try which had been presented up to that time. In its component parts the gamut was run from Ross Winans, the Baltimore locomotive-builder, and probably the most picturesque character in the annals of the business, to Plimmon H. Dudley, the inventor of the modern steel rail.

In relating the researches and achievements of these remarkable men, and of Baldwin, Westinghouse, Pullman, and many others whose names are known all over the world, Mr. Carter certainly unearthed a wealth of unsuspected and hitherto unpublished reminiscence. Biography lost its dullness through the clever recital of interesting and well-told stories of the men who made railroading possible, and if your pleasure in reading them equaled ours we are repaid with the author for the labor of their preparation and presentation.

In the foregoing the remembrance natural-



J. R. STAFFORD.

HIS FICTION STORIES PICTURE, WITH MARVELOUS ACCURACY, THE DEEDS OF DARING OF THE ENGINEER.

ly came to us that THE RAILROAD MAN'S MAGAZINE has covered an unusually wide field in telling of prominent railroad men and their doings. "The Men at the Top" related the stories of the presidents, and through the "Getting Off the Sidings" you were kept well informed regarding the progressive movements of the lesser lights.

The end is not yet, because the magazine



EMMET F. HARTE.

HE RELATES, WITH FACILE PEN, THE QUAIN
DOINGS OF THAT JOY-DISPENSING PAIR,
"HONK AND HORACE."

proposes to make a brief mention of at least every man of authority on the railroad; of his present position, what he has done, and maybe of the little peculiarities which associate with the majority who have won success in this exacting business. We cannot say just what form this presentation will assume, but it is one of the good things to come.

A large majority of our readers are practical men, and, with the friendliness which so soon became established between us on the congenial environment of the Editorial

Carpet, they began to refer to their favorite monthly for the solution of many little problems which daily confronted them in their work at hand. Thus the prominent department, "By the Light of the Lantern," came into being, no doubt the most popular feature ever incorporated in a magazine.

In the November, 1907, number the invitation was extended to railroad men in any capacity to "Ask Us." In this announcement we did not claim that the answers would be infallible, as it was well realized that the varied constituency of the new department would necessarily present many hard nuts to crack; but our confidence was strong in the railroad man of long experience whom we engaged to "swing our lantern," and the outcome was awaited without misgiving.

The rapid growth of this venture in intrinsic worth as well as volume needs no comment here. We would be pleased to quote from a portion of the myriad letters which the editor has received in the past three years, commending the conciseness and thoroughness of the replies, and thanking us for the sound and practical advice which the editor of the "Lantern" has been so frequently called upon to give.

The popularity of this now strongly established department has been no unimportant factor in the success of THE RAILROAD MAN'S MAGAZINE. It has served in the valued capacity of continually attracting new and retaining old friends, and, last but not least, it has endowed the magazine with a prestige of which we are mighty proud.

Although you may not have recognized the fact, the Lantern department for a long time has traveled hand in hand with another particularly prominent department, which we have called the "Self-Help" feature, or, properly, "Help for Men Who Help Themselves." This and the Lantern, in the aggregate, really constitute our real claim for technical recognition, and the history of the Self-Help feature is of such interest that we feel impelled to tell you about it.

The considerations which brought it into being were of mature deliberation. We desired to add to our many features another in which the primary object would be to describe the inner workings of the railroad world. For instance, we aspired to take in detail the work of a fireman, and that of his more exalted *confrère* on the other side of the cab; we wanted to tell you how a locomotive is built, and of the pulse which throbs in its vitals.

We did not propose to stop there, either, because the track, the telegraph, and many other ends were just as important, and called for equal recognition in their turn. It was impossible, in view of our varied clientele, to relate the story of one without the other; and, so long as we have introduced this subject, let us see how we have measured up to it.

Our first story in "Help for Men Who Help Themselves" appeared in the August, 1907, issue. It was entitled "The Making of an Engine," and was written by Robert H. Rogers, who at that time held the position of master mechanic on the New York, New Haven and Hartford Railroad, at Boston, Massachusetts.

Mr. Rogers accompanied this story by two others—"How a Locomotive-Boiler Works," and "The Inside History of a Locomotive." We were impressed by the evident mastery of the writer over his subjects, and no doubt the ease of style and absence of stiffness which characterized their portrayal—features which carry a particular appeal to the trained editor—were active in dictating our subsequent attitude, and this was to besiege Mr. Rogers for more articles.

To be entirely candid with you—which, in fact, is the real object of this writing—we thought that, so long as we had secured thus opportunely three acceptable offerings of the very goods which we knew you wanted, they might form the basis of a permanent feature. Of course, it was problematical at that time whether additional material of equal force and appeal could be readily secured; but, as the saying goes on the road, we "took the chance." The result quite clearly indicates that the "Help for Men Who Help Themselves" has been a valued asset.

The writers who contribute to this particular feature must necessarily possess qualifications somewhat unique. In the first place, they must have an intimate personal knowledge of what they are writing about; and, second—which, to many, is the hardest requisite—they must know how to write acceptably what they have to say.

We feel that these difficult requirements, this unique combination of talent, has been well realized in the articles by Arno Dosch, Peter Mulligan, Charlton C. Andrews, C. F. Carter, and others which have regularly appeared in the Self-Help Series, and of which some further mention will be made.

Mr. Rogers has written many articles for this magazine from an educational standpoint, and, furthermore, from the standpoint

which knows whereof it speaks. He has the honor among our contributors of presenting the first Self-Help story. We regard with particular significance his work during the year just passed in our history—the series which appeared from April to August, 1910, wherein the progress of a neophyte in the mechanical department of a railroad was traced from the humble apprentice's berth



ROBERT FULKERSON HOFFMAN.

HE HAS PICTURED, IN MANY SHORT STORIES, THE PSYCHOLOGICAL SIDE OF THE RAILROAD MAN'S LIFE.

to the proud eminence occupied by the superintendent of motive power.

These articles were enriched with added interest through the general knowledge that Mr. Rogers has himself filled every position from cub to master mechanic. It was not necessary in his delineation to strain for words or for effect, because—as we have often said—a true story largely tells itself. We regard the "Rogers Group" as the most valuable series, from an informative standpoint, that we have printed.

Perhaps you are wondering by this time what was meant when we said that the "Help for Men Who Help Themselves" and the Lantern department traveled hand in hand. It was simply because questions submitted to the Lantern from time to time impressed us as being worthy of elaboration in the Self-Help feature. For instance, those of you who are Lantern readers know that for quite a long period we were besieged with queries as to whether the steam-locomotive was doomed to be supplanted by its electric rival. This induced the preparation by Mr. Rogers for the September number of "Why the Steam-Locomotive Will Stay"; and similar queries regarding the Walschaert valve-gear resulted in the matter being thoroughly covered in a special article which will appear in November.

Thus you will see that you have had quite



HERMAN DA COSTA,

WHO WROTE THE SUCCESSFUL SERIES, THE "LETTERS OF AN OLD RAILROAD MAN AND HIS SON."



ARNO DOSCH,

AUTHOR OF "TRAGIC TRAIN ORDERS," "MOMENTS OF EMERGENCY," AND OTHER TRUE STORIES OF COURAGE.

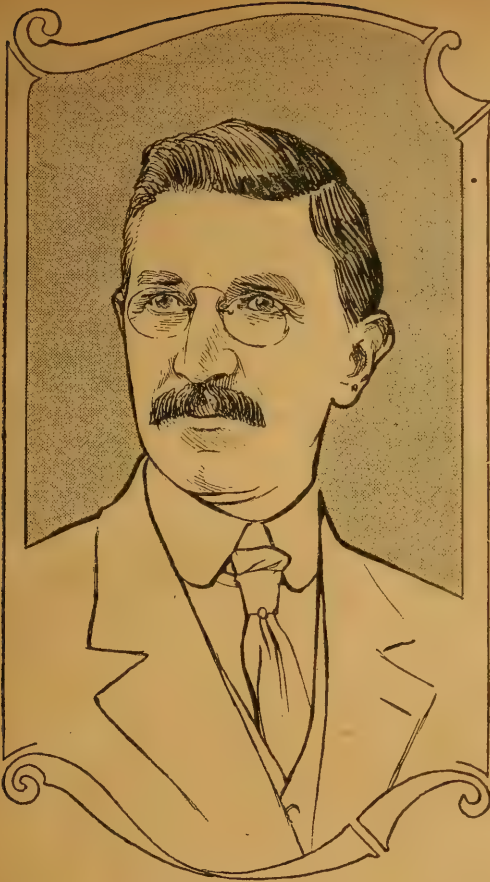
Photograph by J. K. Cole, New York.

a voice in the selection of articles which have appeared in the Self-Help Series.

A subject of general interest which has been featured in this department was "Electricity for Telegraphers," by J. H. Gingrich, which continued through three numbers, and which we believe constituted the most lucid explanation of the telegraph in general which has ever appeared in print.

Another valuable series, by Charlton C. Andrews, was on the actual building and maintenance of the railroad, which appeared under the following heads: "Surveying for a Railroad," "Building a Railroad Track," "Keeping a Railroad Track in Order," and "The Men Who Handle the Engines."

These articles, and many others which limited space prevents our mentioning, have appeared in thirty-six numbers of the magazine, and, in all probability, contained the very information in compiled form which you had been awaiting for years.



AUGUSTUS WITTFELD.

AUTHOR OF THE FUNNY "CARLOCK BJONES"
STORIES, AND THE DOINGS OF "DUGAN"
AND "MONK HAUSEN."

In September and October, 1907, Mr. Rogers told you how a locomotive-boiler works, and how the locomotive is constructed; in February, 1908, John Elfreth Watkins followed with a graphic description of the actual building; and in the next number C. T. Rommel described the intricate process through which its pulse is felt, the ever-exciting work performed by real heroes from their perilous perch over the throbbing cylinders while the engine is "doing her mile."

It is the story of speed.

This series has contained the story of the block system; it has explained how train orders are made, and has discussed the more intricate problems of getting at the truth about the rolling-stock. Indeed, so broad has been its scope from a practical standpoint that, notwithstanding our own familiarity with the Self-Help department, we are

amazed at the wealth and diversity of material which has been presented.

It is our intention to continue covering every important part of the railroad, and the industrial fields contributory thereto, so fully that those who follow the magazine closely will have as perfect a knowledge of each department; appliance, and operation as it is possible to secure without actual practical experience. The primary object of the "Help for Men Who Help Themselves" is to add to the knowledge and consequent value and efficiency of the railroad workers who are anxious to climb to higher grades, but the articles must still be of tremendous value to all "outsiders" who are possessed of an ordinarily healthy curiosity about railroad matters.

The man who wants to know because he likes the sensation of knowledge will be well repaid by scanning this department and our special articles closely in the future. There



HORACE H. HERR,

A HUMORIST WHOSE CLEVER WORK IS WELL
ILLUSTRATED BY HIS PRESENT SERIAL,
"ON SHORT TIME."

is an unlimited field ahead, and, although much has been accomplished, we have in reality only started.

For those who find relaxation in a study more intricate than above described—that of human nature—it has been here for you to delve into through the inimitable “Observations of a Country Station-Agent.” We trust that this pleasing philosopher will remain with us for some time, because J. E. Smith has done more than write merely humorous stories around his profession. He is the Sage of the Station-House.

His clever work, which has been embodied in many numbers of the magazine, forms in its entirety what is really a railroad classic. The quaint humor, keen perception, and knowledge of humanity reflected in every phase of these observations carries an appeal so unique that it knows no particular clientele. It makes no difference what your position in life may be, either on or off the railroad, you would be lacking in that which makes the whole world akin if you did not enjoy Mr. Smith's observations.

So much for the more important achievements of THE RAILROAD MAN'S MAGAZINE during the four years it has been learning its trade and qualifying for a more active field of usefulness in the future. If there has been undue dilation in this little history, it is because we are truly proud of what has been accomplished, and in this pleasant retrospect we wanted particularly to tell of the difficulties which have beset the way; of the many hard battles we have fought to raise this magazine to a popular plane, and which, with your assistance, we have won. We are

thankful for the kind tolerance which you extended during the period of our earlier efforts, and for the well-meaning criticisms which you offered before we began to “hit up our gait.” We have a kindly thought, too, that probably no magazine ever existed where editors, contributors, and readers have met on so agreeable a footing.

A department of the magazine which has given us a great deal of pleasure is our own little corner, “The Carpet.” Here is where we talk with the boys at close range, where we tell our troubles and listen to theirs. It is our corner in the roundhouse, our meeting-place while waiting for the call-boy or the train orders. In this department we have published many famous old railroad poems. We have gone to considerable trouble to dig up some of them, and others have been contributed by our readers. We are proud of our collection of old railroad poems, for they are filled with the fire of heroism and courage as well as the quality of human kindness.

That we have pleased the women folk is readily attested by the volume of letters received from the wives, the daughters, and the sweethearts of the boys. They like the magazine because it pictures the lives of the men in whom they are most interested.

We believed in the success of THE RAILROAD MAN'S MAGAZINE from the start, and contributors, artists, and editors have worked shoulder to shoulder toward this realization.

The magazine passes into its fifth year secure in its ability to do greater things than those which have marked its past. We thank you, boys, for your kind support. May you never put the arm against us.

WHAT DO YOU LIKE BEST IN THE RAILROAD MAN'S MAGAZINE?

HERE'S your chance, boys, to cast your ballots and do a little voting on what YOU consider the most interesting feature in THE RAILROAD MAN'S MAGAZINE.

If there is any particular department or line of stories or articles that you particularly like or consider better than some of the other matter we publish, just make a check after the subject in the list printed below. Cut this out, paste it on the back of a postal card, and mail it to us. It will help us to get more of the sort of stuff you like best.

Serials

Short Stories

By the Light of the Lantern

The Railroad Man's Brain Teasers

Observations of a Country Station-Agent

Told in the Roundhouse

Honk and Horace Stories

Told in the Smoker

Gilson Willets's Tours

Special Railroad Articles

True Stories Series

On the Editorial Carpet

Address: Editor, THE RAILROAD MAN'S MAGAZINE,
175 Fifth Avenue, New York, N. Y.

THE DAY'S RUN.

BY ROBERT FULKERSON HOFFMAN.

The Simple Story of Some Everyday Folk Who Do Their Work Well and Seek No Glory.



“ALL the world loves a lover,” twittered a little woman, who stood with her friends just below the cab-window. She set her hat straighter on her head, she believed, and patted her back hair until it suited her imagination, meanwhile smiling benignly after a young couple who were self-consciously making their way down the platform. They appeared to be embarking upon a life adventure by way of John Labenburg’s train.

The little group beneath the cab-window dissolved into the hurrying throngs in the big train-shed, and if the repetition of the old saw—which, perhaps, holds more of jingle than of truth—made any impression upon John’s faculties, he gave no outward sign.

True, a brighter gleam may have lighted the old man’s eyes for an instant as he continued to look back along the train, but he took no more notice of the speaker than of the hundreds of others who were part of the animated scene.

Labenburg, in some respects, was disappointing as a locomotive engineer; but, in reality, there are many Labenburgs. That is to say, he was not down on the platform before a group of admiring passengers, doing unnecessary oilings; or feeling the driving-axle centers with the back of his hand, to learn if they had run hot, when he knew that the engine had been standing in the roundhouse for the last ten hours; nor was he loosening needle-feeds in the oil-cups so he might look profoundly at them and tighten them up again, when, in the beginning, they were all right and just as they should be.

In short, John never made a play to the grand stand in his life, and would not have known how to go about it. He made most of his preparations at the roundhouse.

When he got the signal he was watching

for, he withdrew his calm-eyed old visage into the cab, and, with an after-dinner sigh, dropped his hand caressingly upon the brake-valve and released the brakes.

He looked out again for the answering signal from the far end of the dusky train-shed. It came. When he settled comfortably upon his cushion, his young fireman was fuming about a leaking flue, and had just succeeded in kicking the fire-door shut in a way that did not at all comport with his good-natured face.

“Billy, did you hear what the little lady said of you?” queried Labenburg.

“Not about me,” said stalwart Billy with emphasis. “I can improve upon it, though: ‘All the world kicks a kicker’—or ought to. If that man at the roundhouse would quit kicking and calk flues, we could do better on this run and less coal would be charged against us.”

“Don’t kick, Billy,” counseled Labenburg with much gravity. “We do pretty well sometimes.”

Billy grinned guiltily and climbed upon his seat-box to wait for the starting signal. When they got it, and the shrill treble of the little air-whistle in the cab died away, Labenburg opened the throttle as gently as one might draw upon a softly-opened door; and, as gently, the engine at first responded.

There is a moment that is dear to the heart of an engineer, and yet it is one in which the engine, to the inexperienced onlooker, seems to fail of its promise of strength. It is that moment in which the eye of the man in the cab is fixed upon the floor or the earth at the side of the track, and the forward movement of the engine is so slight that only that view will reveal it to him. It is the actual beginning of the day’s run.

They drew out through the wide-arching mouth of the train-shed into the afternoon

sun, and crossed, from lead to lead, down through the teeming city yard. Curving his able body above the clacking reverse lever, Labenburg drew its resisting length up for quicker speed, and latched it safe and high in the quadrant.

Joy and hope, despair and failure, young life and the quiet dead; a magistrate, late from his ermine, and a madman, bound; the wealth of a kingdom in golden bars in the express car, only a car's length from the cluttered possessions of a party of bewildered immigrants. All of these trailed in the lee of the big engine. All of them, to him, were the train. It was his to move them, swift and sure, to deliver them up where desired, or, at the farthest, at the station one hundred and fifty miles across the prairie. That station differed, to him, from all other stations—because it was home.

The city fell behind like a swiftly rolled canvas of neutral tints, and they curved around the southern shore of Lake Michigan where surf-caps rolled white upon the tawny beach and seemed to fall away brokenly among the sand pines.

A touch of the hand on the brake-valve, now and then, to steady the long line of coaches upon the curves; the expiring sigh of the release upon the tangent; the momentary stammering of the exhaust while a yielding but sure grip reset the fighting reverse lever; the firm, almost imperceptible, play of the hand upon the throttle; the quickening speed; again, the grinding restraint upon the smooth-running wheels, until the signal-arms beckoned them onward.

These were the animating forces that controlled the fate of the hurrying cavalcade of wheels with its motley burden of life, and the steady brain and eye and hand of Labenburg played upon them as confidently as a trained hand plays upon a well-strung harp.

The run was on, and he was composedly a part of it, as silent, serene and alone as though in the heart of a forest. Ruled by the primal laws of compensation in nature, his mind was instinctively working its own economies.

An otherwise unbearable physical hurt brings numbness that is near to physical comfort. A crushing mental shock often gives a mental quiet like that of deep peace. An accustomed tumultuous world of sound eventually gives mental concentration that sharpens every faculty, gives alertness for the hearing and sight of the unusual, and leaves the mind free to deal chiefly with that.

Thus Labenburg ran placidly on, reading

signals—home and distant, distinct and clear—and Billy worked methodically on the deck, rejoicing in the decreasing leak and finding anew that trouble is sometimes worse in the offing than when it comes nearer.

Towns and hamlets arose out of the beautiful flats of the prairie, took on a momentary importance, and slowly sunk into the low distance behind the flying train. The bell sang its musical, crooning note, and the whistle droned across the wide spaces, where no hill sent back its voice, and the smiling land received them with a wide-flung welcome as in days gone, and with happy promise for the days to come.

Once, toward evening, a galloping horse attached to a wildly rocking buggy raced up a country lane between the green hedges, to contest with the engine for the moment of crossing. The space between them narrowed, closer and closer, until a flying curtain waved, like a victorious banner, from the rear of the outfit, after it had safely won the crossing by an instant's lead. The occupant was unaware that the little comedy would have been a thing for his friend to weep over but for Labenburg's slight movement at the brake-valve.

When the train stopped at a village that boasted the name of "Victory" on its small station-board, a little company awaited the home-coming of the silent passenger in the baggage-car. With bared heads they walked haltingly under the weight which the train gave up to them, and, sliding it reverently into the waiting, mud-stained spring-wagon by the track, they placed a seat across it and thus rode away with the great city's contribution to the quiet little churchyard.

In silence, Labenburg and Billy watched the speaking scene, and, when they started on again, the hand upon the throttle drew it open with a kindly touch. The bell, under Billy's steady hand, seemed to sound a slower note, and the mournful chime of the whistle, across all of that broad country, seemed to bear a deeper significance.

But the extra minutes used in the stop were to be regained, and Labenburg went calmly about it, touching, adjusting, urging, restraining, until the long line of coaches again followed its flying leader in steady flight, and sailed around the wide curve with the grace of a hawk in air.

Duly they delivered the pair of cooing doves, who, apparently, were supposed to be living on showers of rice, and in due time the judge strode away in majesty up the shaded street of a suburban puddle in which

he was, perhaps, the biggest toad. Turning at the curb, from daily habit, he waved a paternal farewell to Billy, much as one might say:

"Your greatest work is done, my son. Now run along to your supper."

And Billy, strong in the habit grown of another view-point, waved a polite adieu, and turned with merry eyes to meet Labenburg's slow smile as he fixed for the far-reaching miles ahead.

Where the tracks spanned the deep and rocky bed of a clear, babbling stream, and broad, smooth-clipped lawns sloped up among tall firs to a secluded city of refuge upon a swelling knoll of the prairie, they came to a halt with no ring of bell or sound of whistle.

There, the madman, with hands encased and unseeing eyes, stalked up the knoll, singing, over and over again, a plaintive refrain. It struck a quivering chord with the low notes which Billy drew from the bell at starting, until it wavered away with the man's receding figure among the trees and was swallowed up in the thickening exhaust of the engine.

The open book of the day's run lay again before Labenburg, who was looking steadfastly ahead on the track. Far and wide upon the great steel web of track that has reclaimed the wilderness and made it the noblest workshop and playground of the world, a host of other Labenburgs were reading, understandingly, without qualm of fear or wide-eyed haste, other familiar pages of the daily story of the track—the vivid, common story of a common day from pages which are changing with the moments.

The sleeping country roads were growing more marked in the slanting rays of the sun, and the engine crooned a deep, low monotone through the wooded places as she fled across the long level. Through the busy, teeming hours she rocked and steadied and plunged ahead, climbing among rugged oaks, rises in loud-voiced triumph, and, again chanting a low requiem over the straight and silent places.

Where the prairie was dotted by widely grouped cottages in the distance, the train again stopped. Some new-formed Arcadia welcomed the careworn immigrants. They turned their tired faces, eager-eyed, to the

reddening rays of the sinking sun, shouldering their crude luggage from the baggage-car with many lowly bows, and trailing away into their new land of promise to claim a manhood they had never known.

The hands of the big illuminated clock in the station were drawing close to seven of the evening, and the piercing rays of the big torch, high upon the City Hall tower, were flashing farewell signals after the departed sun, when the train came hurrying steadily out of the darkening maze of the afterglow, across the waving fields, and thrust itself into the narrowing throat of the terminal yards.

It glided into the lighted gloom of the big station exactly at seven by the hands upon the glowing dial high upon the wall beyond the ends of the tracks. A final vibrant hiss from the brake-valve spoke sharply to the engine looming large toward the guard-post which stood directly in its path. Slower and slower the menacing engine crept nearer the obstruction, until, in the last forward turn, Labenburg set the brake-valve handle to full release, and the train was still and free, without a demurring lurch; free as it had been through the living hours in the freedom of a sure control.

All was quiet for a moment, except the regular pulsing of the air-pump. Then the station renewed its murmur of restrained life—so like the murmur of a shell from the sea. Then came a group of men who took the golden treasure from its car and carried it away. The hurrying throng flowed by, unnoted and unnoted. The day's run was finished.

A little later, a happy-faced woman looked up in the failing light from among the flowers in an old-fashioned dooryard as the gate-latch clicked under Labenburg's hand.

"Prompt as ever, John," she said. "Was it a pleasant run to-day?"




"Like canoeing on the river in June, mother," he answered. "Where are the children?"

"They were with me, here, until they saw you coming. They have supper ready now."

"Suppose we tie up those nasturtiums in the morning," suggested Labenburg.

"I was thinking of that when you came," she replied.

The transportation problem is a national issue; the best talent of the country is in constant demand to handle it.—The Vice-President.



Water-Tank Wisdom.

A derail is like Providence—appealed to
as a last resource.

If opportunity flags you, don't be too tickled
to read the orders.

A little authority makes some men as over-
bearing as the high rail on a curve.

Where there's smoke there's fire, but—the
hottest fire makes the least smoke.

7 Better a lowly pedigree in a meadow than
noble ancestry in a damage claim.

He is a wise despatcher who never says:
"One reading of the order is sufficient."

Beware of head-on collisions at life's meet-
ing-points. The wrecker cleans up both trains.

Bad luck runs on no schedule, and you are
apt to meet it going and coming—but it's the
same with good luck.

Don't sit in the shade of the mogul and
tell the tallow-pot how disappointing life is.
'Tis a poor way to get over the hill.



"ARE YOU ATTORNEY FOR THE RAILROAD?"

J. NORMAN LIND.

Observations of a Country Station-Agent.

BY J. E. SMITH.

No. 29.—Some Simple Narratives About Clay Calhoun Sokum, the Legal Luminary of Pippinville, Whose Specialty Was Corporation Law, and Some Reasons Why Railroads Are Shaky for the Future.



HIS is an age of specialties. To succeed and reach the "shining-mark" point in the world's affairs, a man must spend his energies on one thing—it does not matter what.

If he learns to turn a grindstone better than any other man, a job awaits him. If he can only whistle to a yellow dog more enticingly than any other man, there is a place for him.

Times have changed. In pioneer days we took the large-bore shotgun and bagged all sorts of game because it scattered, and we could not miss. Now, if we scatter, we are likely to get something we do not want, and muss up the sport besides.

The mechanic and artisan become skilled by one particular movement. A thousand bits of special work contributed to the aggregate produce a finished article that is the wonder of the world.

No one man can build it all. Every man gives the best of himself to a single one of the thousand parts. When assembled the product is the highest possible attainment of the human head and hand.

It is that way throughout—in science, philosophy, law, love, and war. Every man must concentrate and learn a single part, otherwise he bungles.

The above bits of philosophy were taken bodily from the cold storage of general wisdom, and were suggested to me by reading

the following business card in the Pippinville *Banner* of a local attorney:

CLAY CALHOUNE SOKUM

Attorney

Real Estate and Insurance

Corporation Law a Specialty

There it was.

Other things might claim immediate attention, but the main fact stood out in bold announcement that, in the one particular direction of corporation law, Sokum was using a term not exactly taken from Blackstone, but otherwise elegant and forceful. Sokum was the original "ring-tailed peeler."

Let us get the idea clearly. In the dry and dusty village of Pippinville there are no resident corporations of any kind, only the placid routine of a country town. I had a curiosity to know why, under such uninviting surroundings, Sokum had turned into the avenue of corporation law.

I asked the shoemaker, the livery-stable man, and the blacksmith, but none of them knew. Then I called on Sokum.

He had a lean *Cassius* look, and his tunic was somewhat shiny at the elbows and frayed about the edges.

To my question of why, he lifted a high brow and replied:

"I am a young man of thirty. Twenty years from now there won't be anything but corporations. They'll own all the little stores and shops and work places, and the individual man will be only a part. I will be but fifty then, and in the zenith of my power and intellect. And I will know it, because I have made a specialty of it."

"But for the present?" I asked.

"We have the railroad."

"Are you attorney for the railroad?"

"No. But I hope to be. They tell me they do not need an attorney at Pippinville; but they may see different. I represent the people. The People *vs.* the Railroad. The people suffer impositions, sir, and injustices, sir, and outrages, sir, and remain silent unless there is some one that knows, and can secure redress for them."

"Do you have many cases against the railroad?"

"Now and then it is necessary to instigate suit. I have had a few cases, and I have beaten 'em, sir," he added with an emphasis of triumph. "I have recovered for

my clients from the railroad. That is a great satisfaction for a rising young lawyer, sir, because the railroad is alert and skilled, and is a foe worthy of the steel [Figurative speech—he meant steal] of any lawyer.

"When I beat 'em it adds prestige to my name. These small squabbles between neighbors heard before a justice of the peace don't get a lawyer anywhere. But when you beat the railroad the whole community sits up and praises you for turning the trick.

"If you can beat 'em a few times, you've made a reputation; and that's necessary to a lawyer, sir. As I said before, there won't be anything but corporations after a while, and I'll have my name made before the younger attorneys wake up."

Sokum got this off with a serious and dignified earnestness. He had a few books in his office and a second-hand typewriter. A layer of dust, like a mantle of charity, covered everything. His desk was littered with unanswered and unfiled correspondence, and one end was piled high with the "come-on" homesteading literature of the Great Alkali Desert, for whose broad acres Sokum was the resident agent.

I was attracted to Sokum because of the suggestiveness of his name, the unpromising surroundings, and the high resolve to make corporation law a specialty when there was but one corporation in sight.

I was curious to know what Sokum had done for the people? In what way he had circumvented the railroad? What great principles of law he had established in his community? In fact, just how he had proceeded against the one corporation within his reach.

In truth, there are Sokums in every town throughout this broad land.

In thinking of Sokum and the railroad, I call to mind the old farm-horse that plods along the best he can, hauling the country produce to market, but stung and harassed all along the dusty highway by a pesky gad-fly after a drop of blood. The railroad tries to do its work, but winces under insect stings at every turn.

I made a few inquiries, and I gathered a few little incidents in Sokum's career which illustrate the operation of a village attorney who makes corporation law a specialty.

The station baggage-master told me this one:

An old man, wearing a blue uniform and a G. A. R. badge, had a canvas suit-case checked to Pippinville. It failed to arrive, and that road was unable to locate it after the usual search.

It did not occur to the old soldier to ask the railroad company to compensate him for his loss.

After roundly abusing the baggage-master and hurling a few choice anathemas at railroads in general, he told his troubles to Sokum.

Sokum made formal demand on the railroad to produce the grip.

No grip.

Then he held a star-chamber conference with his client.

Snookenhaimer. I've wore that suit three years. Does that make any difference?"

"Not in the least," assured Sokum, posing his pencil; "now, what else?"

"They wasn't anything else."

"What," protested Sokum, "nothing else in the grip? Think again, man! Didn't you have any jewelry?"

"Only my G. A. R. badge—an' I got that on."

"Any shoes or underwear? Think again, man. Surely, you had something else in it.



"IS TWO DOLLARS AND
A HALF ALL I GIT?"

"We've got to know every article that's in the grip," said Sokum.

"Well," replied the old soldier, "they ain't much in it. They's a second-hand suit. It's been wore some. It cost me eight dollars and fifty cents."

"All right," said Sokum. "One suit—eighteen dollars and fifty cents."

"Eight dollars," corrected the client.

"Oh, eight dollars! That's pretty cheap. We'd better make it ten. That'll be letting them off pretty easy. Not much of a suit under ten dollars. One suit, ten dollars. What other furnishings?"

"They was a quart bottle of good old

One bottle of herb-liver tonic, one dollar. That's eleven dollars."

"They was a handkerchief in the coat-pocket."

"Good! One silk muffler, fifty cents. That's eleven and one-half. Wasn't there something else in the other pocket?"

The client gave a dismal shake of the head.

"I told the baggage-man what was in the grip," said he.

Sokum shook a reproving finger at him. "Don't never do a thing like that. Don't tell 'em anything. Tell me. You damage your own case by talk. You must never

talk when you've got to sue. That's what the other side wants. They want you to talk, then they know all about your case."

The client batted his eyes in bewilderment.

"There's the grip itself," continued Sokum. "A good leather suit-case costs five dollars."

"Tain't leather," corrected the client. "I bought it of Ikestein six years ago. It's canvas. It cost seventy-five cents."

"Seventy-five cents—six years ago. Everything's gone up. Worth one dollar to-day. One canvas suit-case, one dollar. Total, twelve dollars and fifty cents. Only twelve dollars and fifty cents!"

Sokum repeated this with evident disgust. "Seems to me you would have some other articles in there."

"That's all they was," insisted the obtuse client.

"All right, then. I'll make 'em dance. Now, don't you have anything to do with 'em. If they tell you anything, or write to you, you come to me with it. If they ask you to call and sign for anything, you come to me, and I will go with you. They won't play any shenanigan on you when I'm with you. Don't go near 'em yourself. You see, you are taking an affidavit to this; and if it ain't exactly right, you're in for it. So, if anything turns up, you come right straight to me."

In time the client returned and handed Sokum a postal-card.

"It's a notice for me to call at the freight-office."

"We'll go right down," said Sokum, seizing his hat. "I put it up to them. They had to settle or have a lawsuit. They knew that when they saw the case was in my hands."

A few minutes later the client and his attorney appeared at the counter at the freight-house.

The agent produced a voucher, and the old soldier signed it.

The agent thereupon laid out a ten-dollar note, and two dollars and fifty cents in fractional coin.

Attorney Sokum stretched forth a grasping hand and appropriated the ten-dollar note. The client raked in the silver.

They passed outside.

"Is two dollars and a half all I git?" asked the client with tentative innocence.

"No fault of mine," replied Sokum, "that you didn't have more articles in that grip."

"Well, we beat 'em, anyway, didn't we?" chuckled the client in feeble triumph. "Won't you come over and have a drink?"

"I don't care if I do," said Sokum. "I'll take one on you."

"This un's on the railroad," grinned the client.

In the evening the old soldier, a little unsteady on his underpinnings, approached the attorney for the purpose of artfully negotiating the loan of a quarter.

"Jush len' me twenty-fi' cents," he said.

"Can't do it," said Sokum. "Can't spare a cent. Here's one of my cards. Better keep it with you all the time."

The old man held it out before him, and through misty and confused eyes made out enough of it to mumble "corporation law spech'ly."

The next case that came to Sokum was that of a farmer living near Pippinville, who had a muck-patch of about two acres in a field near the railroad. The soil on it was of exceedingly light vegetable mold. It would not hold moisture. The crops planted thereon would burn out in the scorching days of summer.

The only thing the farmer ever raised on it was a luxuriant crop of weeds that were adapted to those conditions. In all the years the two acres had made no returns to the owner.

During a particularly dry and dead period a spark from a passing locomotive lit in the patch and started a fire. There was no available water, and it burned for two months, smoldering, widening, and eating away the surface, and dying out only after the entire fluffy top-dressing of two or more feet had been entirely consumed and the clay subsoil had been reached.

Sokum viewed the devastation with horror.

He went after the railroad in behalf of the farmer. He prepared a complaint in which he set forth the richness and fertility of the spot. True, it was not adapted to corn or wheat; but it was to be devoted to rhododendrons and whortleberries—specialized and highly profitable crops of that particular spot, and adapted to that particular soil—but now, alas! the culture of which must be abandoned.

They asked three hundred dollars' damage from the railroad, but finally compromised on one hundred and twenty-five.

Sokum got fifty dollars.

"You see," he explained to the farmer, "if I hadn't shown the possibilities of whortleberry culture on that patch, and what you

were going to lose by not being able to raise them, you wouldn't have received a cent. You can just consider yourself seventy-five dollars to the good."

"What are them whattleberries?" asked the farmer innocently.

The crossing had been provided at one time, but in the course of some track work had been taken out and not restored.

There was some delay, and the farmer grew fretful. In this condition of mind he sought Sokum.



"JUSH LEN' ME
TWENTY-FI' CENTS."

The following year, having gotten rid of the light, loose top-dressing, the farmer plowed over the two acres, put them in corn and got a crop for the first time.

The railroad redeemed his land for him, and paid him for the privilege.

Then there was the case of another farmer whose land lay on each side of the track, and who wanted a private crossing; and was entitled to it, according to the original right-of-way agreement. He mentioned it once or twice to the section-foreman.

Sokum wrote a letter to the president of the road, setting forth the grievance of his client and demanding a crossing at once.

It is the disposition of the private citizen who has no definite idea of railroad organization to appeal to the highest official whenever there are woes to ventilate.

It is the crude conception that one so high will hand an awful jolt to the negligent or erring underling, and which thought adds a sort of secret joy of vengeance.

Sokum's letter, pointed and threatening,

and limiting the time of action to ten brief days, came to the official who had the work to do at a somewhat leisurely gait, so that it was five days from the date it was written until it found the proper official.

Some time before this the section-foreman had reported the matter, and on the afternoon that Sokum licked the postage-stamp for the letter to the highest official the crossing was put in.

Sokum learned of this before the farmer himself did. So, in order to make good, he got in communication with the farmer at once, and handed out this line of talk with a boisterous, fighting voice, a clenched fist, and hit-'em-in-the-solar-plexus gesture:

"No use to fool with a railroad. No use to waste any time writing 'em. I telegraphed 'em! I gave 'em just three days—three days from the day you called on me. If that crossing's not in in three days, we'll do 'em to a frazzle. I'll go after 'em for damages—heavy damages! They know it, too! I've been after them before! They know me, and when I put this up to them, as I did in this telegram, they know something's got to be done quick! You go out there to-morrow, or day after, and see if they have put it

in. If it's not in by day after to-morrow, let me know at once. That's the last minute I'll give 'em!"

The farmer went out the second day to inspect and report. He found a new crossing.

He hurried to Sokum and reported.

Sokum gave a triumphant snort.

"They know me! I have had business with 'em before. When we put it up to 'em by telegraph, they knew something had to be done, and quick, too. If they burn your meadow, or kill any of your stock, let me know about it. Keep one of my cards. We usually charge heavier on corporation cases than in others, but ten dollars will be satisfactory in this case. Thank you. Call again. Don't forget, if anything else turns up, let me know."

In the meantime Sokum's letter was on its "respectively referred" route from the president to the local track supervisor, and he had about as much to do with having the crossing built as founding the Modern Order of Molycoddles.

The ten-dollar fee should have gone to the section-foreman.

This is corporation law in the country. In the city there are more ramifications, and, perhaps, more dignity to the proceedings, and more complications, than are presented in cases involving private crossings, burned-over muck-patches, and stolen grips. But most of it, however high-sounding and complex, is graft or larceny of some sort.

Railroads are keenly aware of this.

We next hear of Sokum as a passenger on one of our trains.

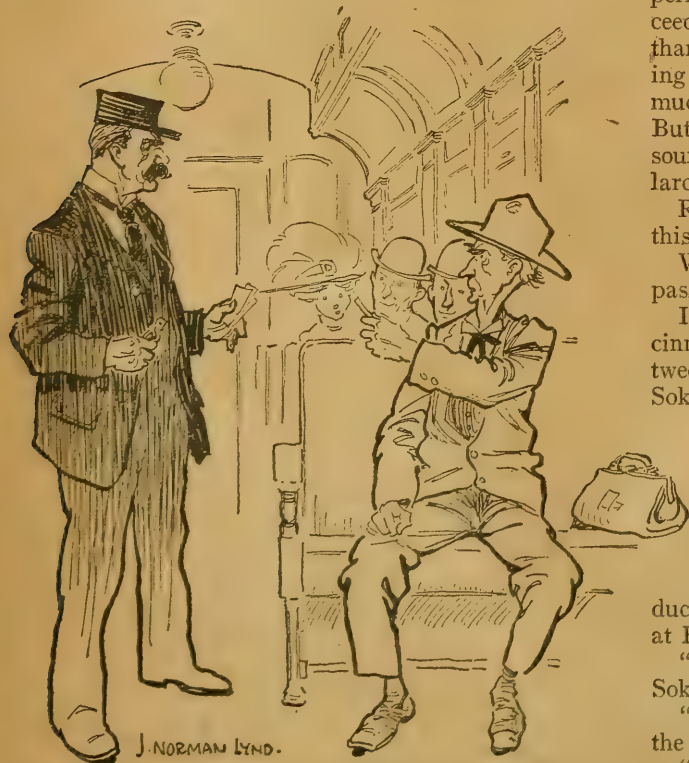
It was our through train to Cincinnati, that makes no stop between Kokomo and Anderson, but Sokum, complacent and confident from previous triumphs, handed the conductor a ticket reading to Frankton, an intermediate "no-stop" town.

"I cannot accept this ticket," explained the conductor. "This train does not stop at Frankton."

"It will to-day," coolly replied Sokum.

"On whose authority?" asked the conductor.

"On that ticket. I called for a ticket to Frankton. It was sold



J. NORMAN LIND.

"MAYBE YOU DON'T KNOW WHO YOU'RE TALKING TO,"
EXPLAINED SOKUM.

to me for this train. I was allowed to board this train, and I expect to get off at Frankton."

The conductor called the porter.

"Did he tell you he was going to Frankton when he got aboard?" he asked.

"What's this got to do with it?" he asked.

"See that," pointed Sokum. "Corporation law a specialty. Don't you think I know what I'm talking about when I say this train will stop at Frankton?"



TWO MEN BEHIND HIM GAVE THE NAMES OF
JOHN DOE AND RICHARD ROE.

"No, suh," replied the porter. "The gentleman suddenly said Anderson."

"I said Frankton!" asserted Sokum.

"This train doesn't stop at Frankton."

"It will to-day."

"Not this day. We will take you to Anderson, and it will cost you twenty-five cents additional."

"You will not get another cent, and you will not take me to Anderson. I have bought a ticket to Frankton. I was admitted to this coach for Frankton, and you have lifted my ticket to Frankton. So this train stops at Frankton to-day."

Now, conductors, however well trained, or however fine the discipline, have certain human qualities. The rules of conduct governing in this case indicate a polite firmness, a well-constrained and genteel positiveness. Nevertheless, the conductor shot out his jaw and snapped authoritatively in a high, decisive voice:

"I tell you we won't!"

The two glared at each other for a bit.

"Maybe you don't know who you're talking to," explained Sokum. "Here's my card."

The conductor took the proffered card and read it.

He was not overawed.

"That don't tell me anything," shouted the conductor. "Maybe you would like to look at one of my cards. Running a train a specialty."

"All I want you to understand is that I know my rights," retorted Sokum. "I want you to have fair warning. Because you'll hear from this if you do not make this stop. It will cost your road something, and you will be made personally responsible, no doubt. I have an important engagement on the arrival of this train. The damage, if you don't stop, will be a good sum. Don't think I will surrender my rights passively. I will exhaust the law in every detail."

With this legal defi, Sokum sat daringly upright and looked out of the car-window at the passing scenery, which indicated to him that Frankton was only three miles away.

The conductor went to the forward end of the coach and spoke a few words to the brakeman, after which the brakeman passed

out into the vestibule. The conductor paid no further attention to Sokum.

The train whistled for Frankton.

The town reposes in a little valley, and trains pass through it at the highest speed.

Sokum arose and glanced anxiously at the conductor, who turned his back indifferently. Sokum expected to hear the grind of the brakes and feel the slackening momentum of the train, but instead the outlying houses went flying by him at terrific speed.

Sokum had not exhausted his resources. He grasped the bell-rope and gave three lusty pulls—three triumphant tugs. There was no response from the engineer, but Sokum did not notice that.

He grasped a small satchel and went forward to be ready to alight. But the main street, a business block, an elevator, and the depot all whizzed by in one blurred and indefinite streak.

He hurried to his seat and looked out.

There was no mistake. They had passed through Frankton like a shot from a gun.

A mile or two farther along the conductor sauntered by. Spying Sokum, he gave a start of surprise.

"By George, brother!" he exclaimed, "you forgot to get off at Frankton."

Sokum whipped out a pencil and a memorandum-card, and began writing furiously.

"You'll hear from this!" he snapped. "You won't be so gay when I'm done with you!"

He made insistent inquiry of near-by passengers for names and addresses for use in Sokum *vs.* the Railroad. Some refused to give him any, and two men behind him gave the names of John Doe and Richard Roe, of Poeville, Indiana—handy names for legal conjuring.

Nor was that the full extent of the humiliation suffered by Sokum.

He was compelled to produce the necessary fare between Frankton and Anderson. He did this under formal and furious protest, carefully putting away the cash fare receipt, and serving notice on all that there would be a final reckoning. It was either that for him or the dusty highway between the two towns.

Now, the real truth of this little incident

was that Sokum had purchased a ticket early in the day for a local train, but missed it, and in the necessity of getting to Frankton had hit upon this expediency of having the fast train stop.

He knew the bell-cord, if pulled three times, would bring the desired results, even if the conductor was obdurate.

The bluff did not work with the conductor, and, as for the bell-cord, the brakeman was wise. He stood in the vestibule with a keen eye, and when Sokum reached for the cord he deftly disconnected it from the valve. Sokum might just as well have tugged at his own watch-chain so far as any signal to the engineer was concerned.

Ordinarily these simple narratives of the legal luminary of Pippinville, whose specialty is corporation law, would not have been collected and set forth if attention to him had not been called by recent political events of that borough.

Sokum has been honored by his party.

In a mass convention, in which the "peepul" select some one whom the bosses pick out for them to vote for, Sokum was named for the State Assembly.

Next year he will probably figure in the output of new and revised statutes with "corporation law a specialty."

There should be no surprise if in the grist there is one making all trains stop at all stations, at all public highways, at all private farm-crossings, or wherever a downtrodden citizen may wish to crook a beckoning finger.

That blurred streak of landscape known as Frankton is indelibly printed on Sokum's mind, and will produce something.

A surprising number of legal regulations that annoy and hamper in railroading come from little petty grievances of legislators that are purely personal.

In time, Sokum may go to Congress.

Then, if he can put in a few corporation kinks, he will become what the country press calls a great statesman. Accent and triple-tongue the word "g-r-e-a-t."

Congressman Clay Calhoun Sokum!

Has a sort of progressive insurgingtailor-peeleritis sound. Small wonder railroads are shaky of the future!

A cracked wheel won't ring false unless it's hammered. Neither will a shallow friendship.—Comments of a Car Tink.

Moments of Emergency.

BY ARNO DOSCH.

FEW engineers have not been called on at one time or another to think and act quickly in order to prevent a wreck. Notwithstanding the many precautions of modern railroading, the unforeseen happens; and whether it is a broken side-rod, a loose rail, or another locomotive that happened to get in the way, the result is the same old story unless it is prevented by the quick wit of the eagle-eye.

Some hoggers have had closer shaves than others, but all have had their exciting moments. Though emergencies occur that offer no choice but a leap for life, others arise which give an engineer a chance to prove whether or not he contains the stuff of which heroes are made, and, like the men of which Mr. Dosch writes, will stick to his post no matter what the consequences may be.

The Numerous Attempts of Locomotives with Broken Side-Rods, Disabled Throttles, and Similar Troubles, to Land Themselves and Their Masters in the Scrap Pile.



THE Banker's Special was beginning to click-click over the frogs through the network of tracks approaching the Harlem River Station, and the business men coming from their country places to their down-town offices, at the leisurely hour of ten, laid aside their papers and picked up their overcoats. The train was speeding toward the Grand Central Station at its usual gait of forty miles an hour, and in only a few minutes they would be whipping through the Subway down to Wall Street.

A shiver passed through the cars, then another, followed by a slight jolt. Within ten seconds the train was jerking convulsively along, and the men who dealt daily in millions without the bat of an eyelash, became frightened, and leaped instinctively to their feet in a mad desire to jump. But before one of them could steady himself in the aisle there was a terrific jar, and the train stopped dead.

Walking into the station, a few minutes later, the passengers saw the engine of the train they had just left locked with a heavy

freight-locomotive which stood on a cross-over blocking the track. Many of them had come to town safely on that train for years and regarded it as infallible, but here they saw before their eyes a wreck they had missed by the skin of their teeth.

For a moment they grew cold with the thought of what might have happened, but within a week they were passing the spot every morning as unconcernedly as ever, and properly so, for lightning is not apt to strike twice in the same place, and there was small chance that there would ever be another wreck or accident again at that point.

After they had all gone, Engineer Edward Ballou, of the express, and Engineer Trafford, of the freight, allowed themselves the luxury of a shiver or two. Then they looked at each other without a word. The situation was beyond speech. If they had not been engineers they would have pinched themselves to see if they were actually alive, but their long training on the iron monsters caused them to waste no time on studying their sensations, and soon they had backed their limping engines away and cleared the track.

Though the bankers may have forgotten the spot, Ballon has not, and ever since that day, April 6, 1910, as he whirls by at sixty miles an hour he wonders how he ever succeeded in bringing the train to a stop in so short a space.

His is an important train, and to it belongs the right of way. He is used to having the track open, and his schedule calls for high speed straight through the yards. There are cross-overs every few rods, but he pays no attention to them. At 9.45 every morning, as he rattles over the frogs, they are all supposed to be clear.

On this morning, however, Trafford, pulling a freight from behind the roundhouse at One Hundred and Thirty-Third Street, could not see or hear him coming, and he was equally obscure to Ballon. Even when he was within a hundred yards of the cross-over Ballon had had no warning of the danger, and he approached swiftly and certainly to what seemed an unavoidable collision.

There was no one to give warning, and the first intimation either had of the impending wreck was when Ballon, with eyes trained on the track ahead, suddenly saw the pilot of the huge locomotive come out from behind the roundhouse and approach the cross-over not fifty feet away. Behind was a long train of heavily loaded cars.

A Wreck Averted.

It made no difference which one reached the cross-over first. Ballon would plunge into the freight and pile up his train behind him, or Trafford would rip out the side of the passenger-cars as they swung past his engine. Either meant dead and mutilated bodies and all the awful carnage of a wreck.

It takes long in the telling, but both Ballon and Trafford acted in a hundredth of a second. The brakes went on in a flash, and the engines fairly leaped from the rails. Trafford, moving more slowly, was able to come to a full stop just in front of the express, but Ballon, with all his power on the reverse, slipped dangerously. Neither man left the throttle, as the quick seconds flew by, risking their lives to minimize the shock. When they struck, Ballon still had a fair headway, but not enough to do damage.

If it had not been for Ballon's presence of mind, there would have been a different story to tell. Indeed, stories of this kind are rarely told at all. Engineers who have narrow escapes are not prone to enlarge on the experience. Instead, they forget as rapidly as

possible. If they remembered, their nerves could not stand it.

With all the modern devices to safeguard travel, there are more emergencies than any one dreams of. At such times the lives of the passengers are in the hands of the men in the cab. Their quick action has averted many a crash, and more than one train has come to the depot untouched on account of the heroism of the engineer.

When the Side-Rod Snapped.

Having made the top of Pickerel Mountain, above Somerville, New Jersey, Joseph Lutz, engineer on the Easton Express of the Central Railroad of New Jersey, had opened up for the long run down into the valley, when he heard something snap. At the same instant the engine shook with a sudden jar, and before he could look to see what had happened, the immense driving-rod, which had broken loose, flashed, gleaming, above the boiler, flaying the air and intent on mischief.

As it came down, it plunged into a pile of ballast, scooped up a charge of rocks and gravel, and, as if maliciously intent on disabling its driver, hurled the whole mass straight into the cab.

Lutz dodged and reached for the lever, but the rod gleamed high again, and, on the second revolution, smashed down upon the cab itself, knocking the mechanism out of kilter and making it certain death to touch it. Again and again it spun around, each time knocking the controlling gear into a more hopeless mass, and sending the smaller steel parts in a shower over Lutz. One piece struck the fireman and he fell in a heap.

From running a quickly responsive and obedient engine, Lutz all at once had on his hands a wild, raging monster, lashing itself into a fury and running at will down the mountain. There was the ever-increasing danger that it would not be able to hold to the rails on a curve, and would leap still more furiously over the embankment, pulling the cars filled with passengers into a sudden and absolutely unexpected death.

Locomotive Bare-Back Riding.

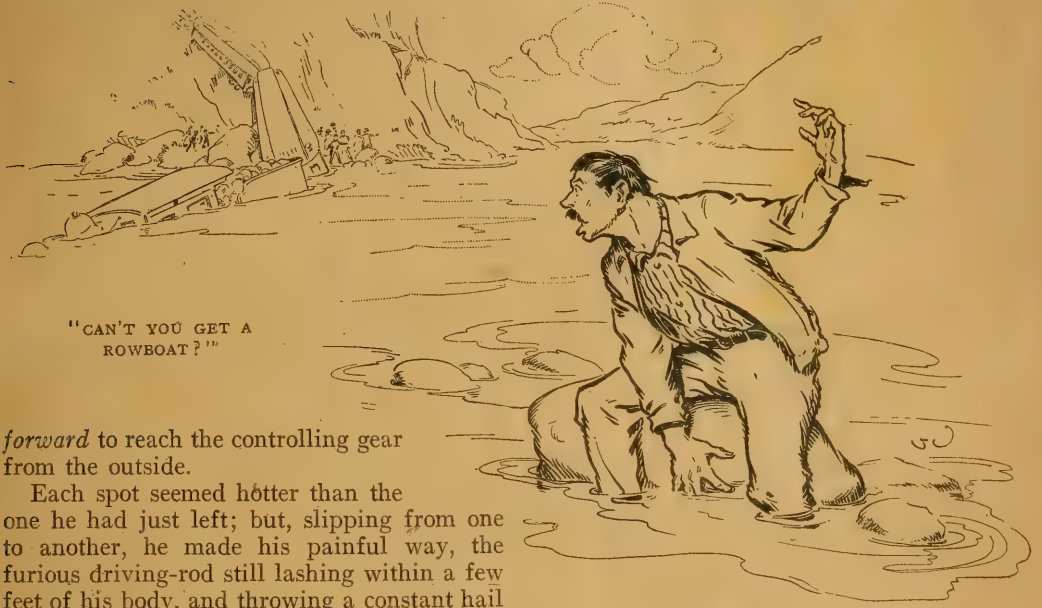
Just beyond was a bad curve, and, half a mile farther on, one that the engine could not take unless Lutz succeeded in shutting off the steam.

This was Lutz's moment of action. Everything that he was used to depending upon had

been cut away by the flaying rod, and yet he had to do something, and do it quick. What he planned was heroic, but he did not think of the danger. His one thought was to stop that train.

Stepping over the prostrate body of the fireman, he climbed without hesitation upon the scorching back of the boiler, and started

There was but one thing to do. With the bell-rope in his hand, he let go and swung for the valve. There was a sudden strain on his wrist; he reached for the valve, and swung back to safety as a white cloud shot into the air that was seen a mile back by the automobilists still sitting with their mouths and eyes wide open staring at the



"CAN'T YOU GET A
ROWBOAT?"

forward to reach the controlling gear from the outside.

Each spot seemed hotter than the one he had just left; but, slipping from one to another, he made his painful way, the furious driving-rod still lashing within a few feet of his body, and throwing a constant hail of rocks and pebbles past him.

Grade crossings are thick on that track, and, burning as he was, he seized the bell-rope and gave warnings. At one was an automobile, with all the occupants still leaning forward from the shock of a sudden stop, and they forgot to move as their upturned, white faces stared in wonder at the madman in overalls and jumper fearlessly working his way along the back of the rocking, pitching, scorching boiler.

The passengers, whizzing past, saw the look of surprise and horror on the countenances of the automobilists, and an uneasy feeling that something was wrong flashed from car to car. But, although the coaches rocked dangerously at the curves, no one could imagine what was the matter, and all sat, in an uneasy silence, while the train ran wild down the mountainside.

As they hit the first curve, Lutz had to hold tight for a second, with the wheels screeching beneath him and the rails groaning under the strain, but it was past in a moment, and right ahead was the curve he knew the train could not take under a full head of steam.

It was a question of fractions of a second.

runaway train. Five minutes later the rails ran out upon the plain, and the broken driving-rod lashed slower and slower until the train came to a sickening standstill. Then Lutz dropped, wilted, to the ground.

Crowley's Steam Bath.

On April 17 of this year, a few days before Lutz showed what a man could do in an emergency, a switch-engine in the yards of the same railroad had its steering gear disabled in a collision, and ran uncontrollable through the terminal, while the engineer, John Crowley, enveloped in a cloud of steam, labored hard to regain control. He was burned frightfully, even through his clothes, and the exposed skin was curled to a crisp, causing intense pain, but he did not have a thought of leaving his post—he was not the kind of man to do that.

He was backing a string of cars across the yard when a box car, attached to an engine which had cleared the track, started back a few feet, just far enough to sideswipe Crowley's switch-engine, breaking the side of the

cab and disconnecting the steam-pipes and doing other serious damage.

Instantly the scalding steam surrounded Crowley, penetrating his clothes and attacking his skin. He could hardly breathe, but he stood there, forcing himself to inhale the steam, which stung his flesh and seared his lungs unbearably.

He might have ducked and jumped, but his first thought was to stop the engine, so there he stood, his eyes closed, his nostrils inflamed, his lips sealed, undergoing all the tortures of a fiendish punishment, reaching blindly at the gear, only to find that it had been so completely bent and shattered he could not move a lever.

All the time the engine, under increasing headway, was swinging through the yard with a string of cars ahead. All the passenger-tracks lay in its way, but fortunately all were clear, as it snapped over one cross-over after another, until it ran at full speed into a bulkhead overlooking the river. After six hundred yards at increasing speed, first one box car, then another, smashed into the bulkhead and over it into the river. The third crumpled and stopped the train.

When the nearest switchmen rushed to the cab they found Crowley bent low to escape the steam, his skin burned as red as a lobster's, still jerking blindly at the levers.

Lucky McGatt's High Dive.

When an engineer has come through a good many accidents without being permanently injured, he gets the name of being lucky, but what has really saved him is usually a cool head. Such a reputation has been built up about one of the most picturesque figures in the railroad world, "Lucky" McGatt.

For fifty-three years, until a few months ago, he drove trains over the Delaware division of the Erie, and forty-eight of them he spent in the passenger service. For continuous service on one division, as far as any one knows, this is the record. Yet he is a stalwart, hearty man, and does not look a day over fifty-three.

They call him "Lucky" McGatt because he has received severe injuries in but one hand, has but one lame shoulder, a leg that gets stiff only now and then, and a cranky place in his back that troubles him less than half the time. Otherwise he is all right, but after half a century in the cab any one will admit that he surely is in lucky.

He scoffs at the idea that he is especially fortunate, and refuses to talk about his hair-

breadth escapes, but there are plenty of people who know about them. During the time that he has been railroading there have been big improvements, and accidents are scarcer now, but thirty or forty years ago the railroads were streaked with blood from one end to the other. Although he has been derailed many times, however, and found himself headed for the ditch with monotonous regularity, he lives to refuse to tell the tale.

On one occasion, a good many years ago, so long past that no one's memory is good enough to hold the date, as he was swinging around a sharp curve along the Delaware, the outer rail suddenly gave way, and, before he could realize what was up, he was driving his locomotive over the cliff into the river.

He Wanted a Boat.

On occasions of this kind the engineer usually winds up at the bottom of the stream with the full weight of the locomotive holding him down, but not so McGatt. As the engine shot out into space, he made a remarkably quick move for a heavy man standing six feet two, and although he hit the water rather more suddenly than he cared about, he made his dive some distance from where the engine plunged under.

The water was deep at that point, but not too deep to prevent McGatt from boring a hole straight through it to the bottom and injuring his hand on the rocks. It did not stun him, however, and as soon as he came to the surface he struck out for the nearest landing-place.

With all the forward end of the train in the river, the crew and the passengers who had not been hurt rushed forward. The rear end of the second baggage-car was half-submerged, and ahead of it were the first baggage-car and the engine barely showing, giving the effect of a huge sea-serpent reaching down from the track into the river. Beyond, on a rock, sat McGatt.

In the tense moments following a wreck those on the bank stood and stared at him, but he only waved his hand impatiently, and is quoted as calling out:

"Can't you get a rowboat?"

It used to be a favorite trick with engines to jump off the high embankments into the Delaware, and McGatt is not the only engineer who has escaped death by keeping his eyes open.

John Kinsla, a veteran engineer, hardly less known among railroad men than McGatt, had the most thrilling leap of all. What

made it worse was that it followed immediately upon a head-on collision.

How Kinsla Escaped.

On August 18, 1888, he had in his train the famous stable of horses which belonged to Mrs. Langtry, each in gorgeously fitted box cars. Speeding along this section of the Delaware, he came upon a freight on a sharp turn one hundred and fifty feet above the river, and a wreck ensued that has gone down in racing history. All the horses were

had begun, and he was carried unwillingly along.

In a moment his consciousness left him, but his last movement must have been to pull himself through the door of the cab, otherwise he would have been mangled beneath the engine. As it was, the engine got there first, and although Kinsla had no feather bed to land on, bounced with comparative gentleness to the bottom, and was overjoyed to find himself still alive.

This particular stretch of road is full of stories of hairbreadth escapes, principally



HE SHOT OVER THE EDGE INTO THE DITCH.

burned, but before this catastrophe overtook them, Kinsla had one of the most exciting falls from which a man ever escaped alive. At the end he was apparently torn almost to pieces, but in spite of the fact that he has recently been retired on the age limit of seventy, he now shows no signs beyond a few scars.

The other engine swung Kinsla's at right angles from the track abruptly over the embankment in a straight fall to the water. At that moment Kinsla, who had recovered from the first shock, realized what was happening to him, and looked forward into the void into which he was plunging. In a flash it came to him that it would be better to hit the bottom alone than with the engine, but before he could free himself the downward plunge

because so many of the old-timers are still on the job. When they go, many of those interesting tales will be lost with them. One of the oldest veterans is E. R. Dunne, who was a conductor even before the Civil War. A wreck finally got him and put his legs out of commission, but he escaped a good many before he was finally laid low.

Dunne Cuts Loose.

His was the day when-signals were in their infancy. The engineer "wild-catted" and the conductor made sidings watch in hand, with his eye on the second-hand.

Before daylight on an icy morning, when

the cars were coated with frozen sleet, Dunne pulled out eastward on the early freight from Elmira. As he passed the cab, before pulling out from the yards, Dunne called out casually to lay in at the siding at Rogers, and not go on as usual to meet the express at Meadows. Dunne based his order on his fear that the track would be slippery, and the engineer knew it, but he had a watch of his own, and he took Dunne's orders for what he considered them to be worth.

When Rogers was reached, the train bowled right along through without stopping, and Dunne, glancing at his watch, suddenly looked as if he were struck dumb.

"Jump to the engine!" he cried to the nearest brakeman. "Tell him to back in! There isn't time to reach Meadows!"

The brakeman was already on the outside, with Dunne close behind, but, half-way across the first car, *his feet went out from under him, and he shot over the edge into the ditch.* Another brakeman pushed past, crouching low, with feet wide apart and hands touching the ice-covered boards. Painfully working his way along, he risked his life each time he passed from car to car, but he was slowly getting forward, with Dunne scarcely breathing on the caboose, when he attempted to navigate a car-load of lumber. He slipped, tottered, reached out

wildly, and shot over the edge after the first brakeman.

It was up to Dunne now. There was no time for another failure. He had to get there. Kicking off his boots, he started over the train in his woolen socks. The bitter cold, striking up through his feet, chilled him through and through, but somehow he made it.

By this time, however, it was too late to turn back. There was at most one minute to spare, with the switch at Meadows only three hundred yards ahead.

Calculating swiftly, he saw that the only chance was to run for it, and, as he passed to the tender, he released the engine from the train.

Freed of its load, the engine sprang forward, and in half a minute's time had made the switch, with the whole train ambling along by itself, coming slowly to a standstill.

Not waiting for the engine to clear the main track, Dunne leaped to the frozen ground, leaving a trail of blood behind him as he raced toward the approaching train.

Before any one could think, the passenger-train, letting up on its speed in jerks, had run by the engine just as it made the siding, and jarred to a full stop when it struck the first of the string of freight-cars in its last spasmodic movements.

WHY HOOD SWORE.

WILLIAM HOOD, chief engineer of the Southern Pacific, is one of the most nervous men in the railroad business. What he does is done well, but he always insists that every pen or pencil that he might need be right where he can place his hand on it.

One morning, not long ago, he reached his office at seven o'clock. He walked into one of the outer offices and asked for one of the clerks.

"He doesn't get here until eight o'clock, sir," said the boy. Hood walked back into his private

office, but remained only half a minute, when he returned and said:

"Get me a hatchet."

The boy brought a hatchet and the clerk's desk was promptly broken open and a mass of documents taken out.

"You tell ——— to leave his keys with you next time," said Hood, as he walked away with the papers.

"Well, if you mean desk keys," said the boy, "I have all of them here."—*San Francisco Call.*

A STANDARD FOR SAFETY APPLIANCES.

AN important work soon to be taken up by the Interstate Commerce Commission is the standardization of safety appliances on railroads, a law placing that duty upon the commission having been passed by the last Congress. In order to pave the way for action, experts connected with the commission, and representatives of the Master Car Builders' Association are in daily conference.

They are engaged in classifying the problems in-

involved in the work, setting apart those on which their probably will be little or no disagreement from the questions over which contention may be expected. When matters have been shaped so that they may be intelligently considered, the commission will grant hearings. Invitations to attend will be issued to railroad officials, leaders in the brotherhoods of railway employees, and the car builders.—*Washington News.*

GIVING RAMSEY THE HA! HA!

BY FRANK CONDON.

The Croton Valley's Fireman Who Could Give Romeo Cards and Spades, and Make Adonis Look Like a Two-Spot.

I DON'T care what anybody says," growled Curtis gloomily. "It's not murder to kill a guy like Ramsey. He is a blot on the face of an otherwise fair civilization. Ramsey is a stiff—a perfume-buyin' stiff—and some one of these sunny mornings I'm goin' to come up behind him with a wrench and close up his worldly affairs."

"You're sore about his stealing your girl," grinned Allis.

"So are you!" roared Curtis. "You're afraid to say so, and I'm not. He cops out your little Mamie, and you sneak around like a spanked spaniel and laugh about it. One of these days, something is going to happen to Ramsey. That's no kid. Something bad is going to happen to that coal-shoveler, and when it gets through happening to him there's going to be a new fireman permanently on the express."

Fish and Chalmers nodded approvingly, and the conference came to a conclusion. The Ramsey in question—Mr. Joseph Ramsey, of Lehigh—pursued the even tenor of his way, fifty miles off, in ignorance of the hostility he had engendered in sundry firemen's breasts.

When a given number of healthy firemen begin to wish ill-luck on a fellow member of the craft there is usually some reason for it. In the case of Joe Ramsey, the reason was plain. It was also widely known, and elderly engineers twitted their firemen unmercifully about the youngster from Lehigh, and his interference with their various heart affairs.

In the first place, Joe Ramsey was the best-looking fireman on the Cro-

ton Valley Railroad. He was an Adonis, a Mercury, and an Apollo rolled into one. His jet-black hair fell over his white forehead in maddening little curls. Furthermore, he possessed the gift of gab to an alarming degree, and when he sat down beside a pensive maiden at a hop or a sociable, and began to tell her interesting things about herself, and how much better the world had been since she came into it, the girl usually melted like butter in the sun.

The result of this happy combination of pulchritude and conversational excellence was wide dissension in the ranks of the other coal-heavers on the Croton Valley.

If Harry Allis fell in love with some dainty bit of lace and ribbon from Topeka, Ramsey



THE GIRL USUALLY MELTED LIKE BUTTER IN THE SUN.

heard of it. He heard of it accidentally, or casually—but he always heard of it.

When he came across such information, he generally managed to meet the lady in question, and when that happened, another male heart burst with a rending crash, and Ramsey chalked up another conquest.

If Tim Chalmers flirted with the sales-person at Princeton, Ramsey superflirted with the same individual, and Mr. Chalmers backed himself onto a siding and put out his lights.

When George Curtis hurled himself madly into a love affair with that Paisley girl, Ramsey trailed along cheerfully and cut George out with nonchalance and complete success. It was to this painful episode that Harry Allis referred whenever he felt he could do so without suffering personal annihilation.

"It ain't so much that I dislike to be cut out with my lady friends," murmured Mr. Fish bitterly, "because I've been getting cut out since I had my first girl; but it must be done by a pretty person with curls and a half-grown voice. It may be that I ain't exactly in a position to see things as the girls see them, but I'll be boiled to death if I can tell what they see in Joe Ramsey."

The Croton Valley Railroad hesitates through several counties, and finally winds up with a lingering moan in the town of Princeton. It would continue indefinitely if it were not for a tall and stationary mountain that has been sitting for many years directly in the center of the right-of-way. Rather than bore a hole through this mountain, the directors of the Croton Valley decided to quit cold and call Princeton a terminus, which is the most dignified thing that has ever been said of the place. At the opposite end of the C. V. R. R. is the city of Lehigh. Right in the middle of the road lies the peaceful hamlet known on the map as Topeka.

Princeton, Topeka, and Lehigh femininity paid homage to the charms of Joe Ramsey, until the remaining firemen on the C. V. R. R. wept when they spoke of it. When the handsome fireman entertained a girl, he bought her ice-cream soda, a ticket to the moving-pictures, and no more. Total cost to Ramsey, thirty cents.

The girl went about for a week telling people that she had had the time of her life.

If an ordinary fireman undertook to amuse a lady, he went under the bureau for the old wallet and brought forth the remains of a month's salary, which he spent in wild abandon, and with a desperate desire to give optical evidence of being a sport.

After some forty dollars' worth of assorted

amusement, the girl usually decided to go home in order to avoid being further bored, and, afterward, she never referred to the event.

It was this intolerable condition of affairs that was slowly bringing on a mental nettlerash among the C. V. R. R. stokers. The only fireman on the road who looked with scorn on the whole affair was Ted Riordan, of Princeton. Riordan was happily engaged to a cherry-cheeked Hutton girl, and the suffering of his fellow creatures was nothing to him. He and Ellen Hutton were to marry in the spring.

George Curtis sat on a lump of coal while his engine was filling the tank, and gave the subject thought. He looked back over the saddening events of the past and shuddered. He reflected that the future was black with the shadow of Joe Ramsey, and just as he was about to give up in despair and commit suicide by diving into the tank an idea came scudding around the side of the cab and hit him with enough force to shatter the lump of coal on which he cogitated.

"What's the matter with you?" his engineer asked later on. "You haven't peeped for half an hour."

"I'm thinking of something important," Curtis replied, smiling. "I've just thought of something that gives me pleasure."

Two days later it chanced that a quorum was present in the roundhouse at Lehigh, and Mr. Curtis announced that if everybody interested would come outside, he had something to say. Fish, Allis, and Chalmers followed him over to the shade of the water-tank with some suspicion.

"You all know Ted Riordan," began Curtis, "and you all know that pretty girl of his, Ellen Hutton."

"We do," said the group. "What of it?"

"And you know, furthermore," Curtis went on, "that this here Ramsey has been clear daffy about Ted's girl ever since he first saw her. She was the one girl on the Croton Valley line that he went after and did not get. Of course, one of the prime reasons why he didn't get her was because she was engaged to Ted Riordan. Anyway, he didn't cut Ted out; and I want you to remember these historical facts, because they got a lot to do with what I'm about to explain."

"What is this, anyhow?" Fish inquired politely.

"It's a scheme I thought out all by myself, and at the present moment I'm going to lay it before this committee for approval. It's some scheme, if I do say it myself, and it's full of complications and fine points;

and any fireman that don't understand the first draft is at liberty to ask me questions after I'm through making my talk.

"I begin by saying that we all thoroughly hate Joe Ramsey for what he palpably is, and for what he has done to the bunch in the way of buttin' in with the ladies. Therefore, we all want to see him get his, and get it good, don't we?"

"We do," chorused the listeners.

"Ted Riordan hates Ramsey just as much as the rest of us, though maybe he isn't quite so keen because he hasn't any personal spite. The rest of us has. Ted Riordan has a girl. He's going to marry her in the spring, and that thought is certain gall and wormwood to Joe Ramsey.

"So far, Ramsey isn't able to get anywhere with Ted's girl; but what if it should happen from now on that he makes some fair and favorable progress? Supposin', for instance, that he begins to get around to the movin' pictures with Ellen Hutton?"

"Yes, and while you're supposin' that," interrupted Harry Allis, "suppose you order a coffin for Joe Ramsey, because he certainly will need it if he gets gay with Teddy Riordan's Ellen. There ain't anything in this mortal creation more certain than Joe's immediate death, supposing what you're supposing."

"If you will be good enough to can that chatter until a sensible man gets through talking," retorted Curtis, "maybe you can understand what my scheme is. As I said before this hair-trigger party busted in, supposin' Joe Ramsey begins to get strong with Ellen Hutton; and when the big engineers' and firemen's ball is pulled off, a month or two from now, supposin' Joe Ramsey takes Ellen Hutton along to waltz, instead of Ted Riordan?"

"Are you out of your mind, Curtis?" inquired Tim Chalmers. "This ain't a scheme you're cookin' up. This is part of the bug-house scene from 'Romeo' and 'Hamlet.' In the first place, you know, if you ain't gone clean nutty, that Ellen Hutton wouldn't go to no ball nor nowhere else if she didn't go with Ted Riordan; and if she did, Ted Riordan would commit all the crimes in the book on the person who took her."

"Again I ask you all to hear me to the concludin' finish of my scheme before castin' criticisms. I figure on having Ellen Hutton go into this scheme with us. And I figure on havin' Ted Riordan go into the scheme, too. In other words, this committee is goin' to call on Teddy and Ellen and ask them,

please, if they won't hook up with us and help us out. We get Ted to consent—then we get Ellen."

"And then what?"

"Then," continued Curtis triumphantly, "we come to the grand finale of this plot, which is the disgrace and utter rout of Joe Ramsey, the same to be visible and audible



RIORDAN TOOK TO SLINKING UP BACK STREETS.

to everybody who can crowd along the upper railing of McCook's Dance Hall on the night of the engineers' and firemen's ball.

"I figure this way: With Teddy Riordan's peaceful consent, Ellen Hutton leads Ramsey along. She seemingly cuts Teddy and caps the climax by going to the ball with Ramsey. She dances all through the program with Joe and neglects Teddy.

"Ellen is the finest-looking girl in this county, and her folks are in close communion with a bale or two of real money. The man who marries her gets all this, and Joe Ramsey knows it, and would marry her in a minute if he had the chance.

"The point is, give him the chance. On the night of the ball the whole gang assembles on the little upper balcony in the back



THE FIVE CONSPIRATORS WAITED PATIENTLY.

of McCook's, which on this gala occasion is called the conservatory. We hide behind the ferns and crocuses, and when Joe Ramsey tells Ellen that she's the star of his life and all that guff, we wait till she turns him down cold, and then we jump over the rail and each man follows his own idea of what constitutes harmless amusement."

"But suppose Ramsey don't propose—suppose he asks her before the night of the ball—that spoils it," objected Chalmers.

"My boy, no man proposes to a woman till the woman gets ready for him to speak the fateful words. Ellen will string Joe along easy until the proper night—just keepin' him at arm's length until he's full of music and poetry and whatever spirits McCook dishes up for the occasion."

"I'm for this scheme way down to the last yelp," Chalmers announced, "but I ain't goin' to ask Ted Riordan for his consent."

"You don't need to," said Curtis loftily. "I thought this out, and I'll go the whole hog. I'll ask Ted; and besides that, seein' that I know Ellen Hutton better than anybody here, I'll ask her, too. Teddy and me will ask her together."

The account rendered subsequently by Curtis of his interview with Mr. Riordan indi-

cated that the latter ascended in the air nine thousand feet, giving vent to emphatic expressions of annoyance on the way up.

"I appealed to him with tears in my eyes," said the spokesman. "I told him that it would reflect credit on him, and that it would even up us firemen and hand Ramsey a wallop he'd never forget. I told him that he'd earn the undying gratitude of about thirty firemen, and that it wouldn't be so hard for him to stand around and watch Ellen going places with Ramsey when he knew the whole thing was a joke, and when he thought of the big smash comin' to Ramsey at the finish."

"Finally he gave in, like the good scout he is, and agreed. But the time I had with Teddy was a mere game of dominoes compared with the tempestuous riot we encountered over at Ellen Hutton's house.

First, she scorched me with a few choice samples of lady sarcasm, and then she threw the prong into Teddy about eleven yards and twisted it.

"But we both unbuckled the founts of our eloquence, and before we got through, Teddy was arguin' for my side the same as though he had a personal grudge against Ramsey. We showed the lady that there wasn't any particular harm in it, and that she wouldn't be called upon to do anything unladylike or undignified; that she was simply to treat Joe Ramsey nice, and about nine o'clock at night Ellen began to smile and look cheerful at my scheme."

"Will she do it?" asked Chalmers eagerly.

"She will," said Curtis proudly. "There ain't anything in the way of complete success. When I told Ellen what was wanted, she understood in a minute, and she improved on my scheme by suggestin' little things that I'd left out. It takes a woman to finish up a scheme."

"Or put it completely on the fritz," said Fish sourly.

From the day of that announcement until the night of the grand ball the Croton Valley Railroad seethed with an inward volcano.

Riordan, Curtis, Allis, Chalmers, and Fish, as the important members of the cabal,

went about their coal-heaving with the air of men in whose bosoms reposed a tremendous secret.

Joe Ramsey went about his business with the cheerful confidence of a man who has no care. Through one of those mysterious circumstances that women talk about on verandas when there are no men present, he became acquainted with Ellen Hutton.

While Joe Ramsey had manifested a wild enthusiasm over particular young women, his attentions to Ellen Hutton mounted at once to one hundred per cent, with ten extra. He escorted her to the moving pictures as fast as the man changed the films. He purchased roses for her at forty cents per rose. He sent her thoughtful gifts by messenger-boys. He hired livery rigs at one dollar an hour. He showered her with attentions until three towns sat in their front yards in the cool of the evening and discussed the case with unfeigned joy.

Teddy Riordan took to slinking up back streets in order to avoid sympathetic looks. He cursed the unhappy moment in which he had given his consent to the farce.

"Be sure, Ellen," said Teddy Riordan, "be sure to put that speech on thick. Tell that guy that you wouldn't marry him in three thousand years if there wasn't another man on top of the world, and that he—you know what to tell him. Remember, I'll be with the bunch up behind the railing, and, after what I'm going through in the way of sympathy over losing you, I'll be highly pleased with any strong talk you hand him."

"I'll remember, Teddy. But you mustn't blame me. You know perfectly well that this plan was yours."

"It wasn't mine," retorted her affianced hotly. "It was Curtis's."

"You came to me with it. I'm simply doing as you and Mr. Curtis asked, and I hope you'll be pleased when it's over."

On the night of the ball most of the trains on the Croton Valley

ceased to run. All the beauty and chivalry of the community were on hand, and McCook's big pavilion was crowded as never before.

Teddy Riordan accompanied himself and a terrific grouch. Joe Ramsey, clad in raiment that would have brought the flush of envy to an East Indian goddess, sat beside a feminine dream whose first name was Ellen. Fish, Chalmers, Allis, and Curtis came in a group, acting like criminals about to break open a safe, and by nine o'clock the festivities were booming along at seventy miles an hour.

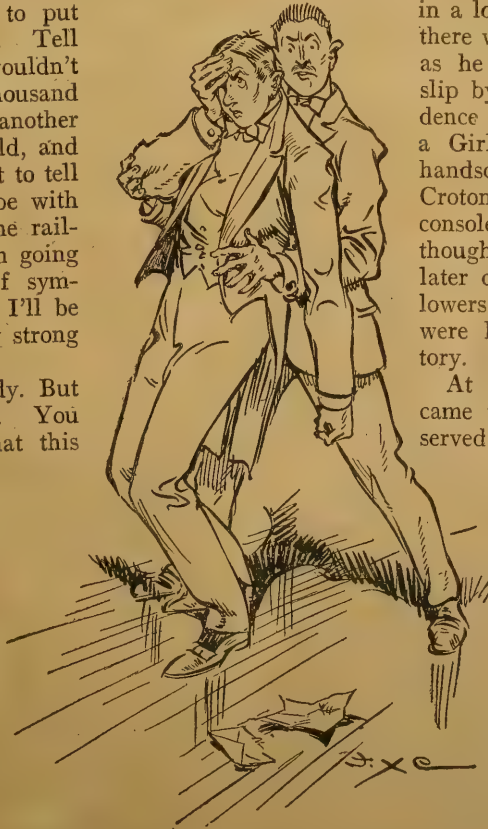
Topeka, Princeton, and Lehigh were well represented, and the eyes of all were upon Ellen Hutton and Joe Ramsey.

That handsome pair glided about the glazed floor, and, so far as casual observers could see, they were having the time of their young lives. Joe smiled down into Ellen's face, and Ellen laughed delightedly. Joe spoke tenderly to Ellen, and Ellen responded with animation.

But, oh, what a wallop was coming to Joe!

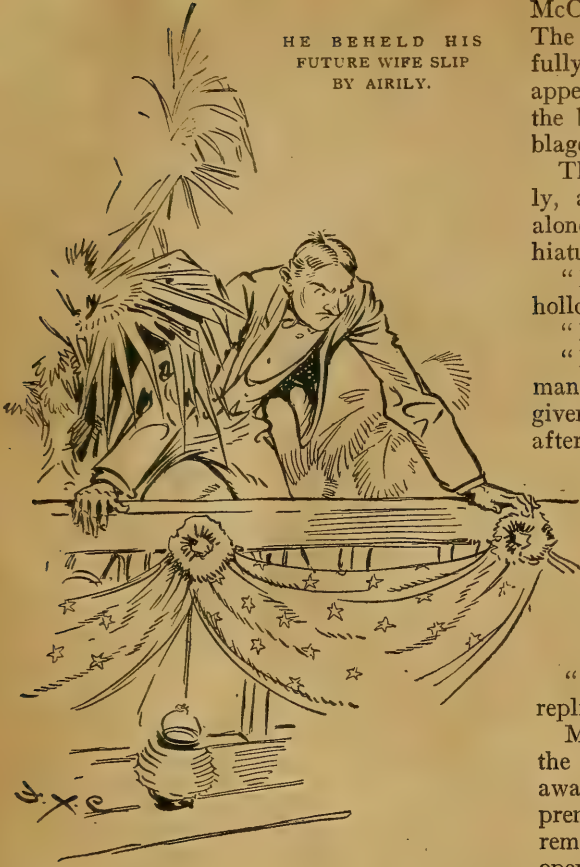
Riordan spent the better part of the evening conversing with himself in a low, heated tone. At times there was homicide on his brow as he beheld his future wife slip by airily to the stiletto cadence of "Gee, I Wish I Had a Girl," in the arms of the handsomest fireman on the Croton Valley system. He consoled himself with the thought of what would happen later on when he and the followers of the inventive Curtis were hidden in the conservatory.

At midnight the gay riot came to a halt, and food was served. Following the repast, everybody sought secluded places, and strong men talked silently to their partners. It was that fateful hour when future marriages are unthinkingly made into possibilities and the members of the scheming bund hurried away from the sandwiches and fried crabs to the observers' gallery.



HE DROPPED THE LETTER AND SANK BACK.

HE BEHELD HIS
FUTURE WIFE SLIP
BY AIRILY.



Ellen had promised to lead Ramsey to the slaughter shortly after the supper. There was no chance of a hitch.

"Now," whispered Curtis. "Now we get even."

The five conspirators screened themselves above the little room and waited patiently. Below them were two rustic couches and a sad-looking fern reposing in a washtub.

"They ought to be in soon," muttered Teddy Riordan, looking at his watch. "Did any one see them begin to eat?"

"Haven't seen them since the last waltz," said Fish cheerily. "They'll be along in a minute."

The minutes went on merrily. Curtis complained of pains in his legs, owing to his cramped position. Fish decided that he was thirsty, and departed in quest of a cooling drink. At thirty minutes past twelve Chalmers manifested the first sign of impatience. At one o'clock Curtis remarked:

"I wonder what is keeping them?"

The dancing was resumed, and shortly after a tall man, wearing a slouch-hat and a red beard, walked into the front door of

McCook's with something in his right hand. The leader of the orchestra gazed thoughtfully at the tall man, and decided that his appearance was worthy of note. He stopped the band, and silence fell upon the assemblage.

The tall man looked about him inquiringly, and blushed when he realized that he alone was responsible for the temporary hiatus. Then he spoke.

"Is Theodore Riordan here?" he said in hollow tones.

"I am," came a voice from the distance.

"I have a message for you," said the tall man in the same sepulchral voice. "I was given a letter to deliver to you, any time after one o'clock."

There was a hurried rush at the rear of the hall. Teddy Riordan came forward hastily, followed by Fish, Chalmers, Curtis, and Allis.

"Here it is," said the stranger. He handed Teddy a letter.

"Who—who gave it to you?" Teddy asked faintly.

"A lady and a gentleman in a motor-car," replied the messenger.

Mr. Curtis felt, for a single instant, that the best thing he could do would be to slip away. He had a premonition—a terrible premonition—but he controlled himself and remained by Teddy's side. The latter tore open the envelope and read the note hurriedly. Then he dropped the letter and sank back into the arms of Chalmers.

Curtis picked up the bit of paper and read:

DEAR TEDDY:

I am sorry to have to write this. Joe and I were married to-day at noon in Crestline. If you ever can do so, please forgive me. It was the only thing for me to do, because I have discovered, since I came to know Joe so well, that I could never care for any other man. Naturally, as his wife, I was forced to tell him of Mr. Curtis's plan for to-night, and he insisted upon bringing me to the ball, although I would have spared you that if I could have done so. Forgive me. Yours truly,

ELLEN RAMSEY.

Curtis gazed about him with unseeing eyes. Then he stuffed the paper in Teddy's pocket and walked away. The orchestra trembled on the verge of a waltz. Chalmers supported Teddy Riordan, and Fish helped carry him to one side. Curtis walked slowly out of the front door and down the road.

At the extreme edge of the hall Teddy struggled in the arms of his helpers.

"Where's Curtis?" he muttered huskily.

THE STEELED CONSCIENCE.

BY GEORGE ALLAN ENGLAND.

The Upper World Mingles with the Under World,
and the End Profoundly Justifies the Means.

CHAPTER I.

Man Against Man.



SINGLE, deep-toned stroke from the clock on Simon Dill's office mantel roused the old lawyer from a sort of reverie.

"Hm - m - m! Half past five?" he said, picking up

his gold-rimmed glasses from the desk and setting them on his thin-bridged beak of a nose.

"Well—well! Bless me, I had no idea it was so late! Agnes will be wondering where on earth I am. Ah, that girl of mine—that girl!"

He passed a hand over his high, shiny forehead, and stroked down a lock of hair, white as spun wool, which somehow had parted company with its fellows. A careful old man, Simon Dill—careful and precise.

"Heigho!" he yawned. "I hate to go out into that, though." He glanced at the broad, black square of the window, against which snowflakes were sliding, falling. "I hate to; but I suppose I must, if I'm to get through dinner in time to address that Bay State Charitable League to-night. Hang charity, anyhow!" he ended, with a growl. "If it weren't for—ah—getting the appointment next year as trustee—Eh?—who's here now?"

He straightened up suddenly, blinking from behind his glasses into the half darkness which lay beyond the radius of the light that fell over his mahogany desk. A man had entered the office; a man in a long, snow-covered ulster; a man who now stood looking at him with an intent and disconcerting gaze.

"Well?" ejaculated Simon a bit testily. He was not the sort of man, this pillar of

society, to be lightly or incautiously broken in upon when musing on his past successes or dreaming of his future ones. To himself he added:

"I won't let Maxwell go before I do another night. Without him in the outer office there's no protection, none whatever. Why—why—anybody might come in here and try to see me!" Aloud he repeated: "Well, sir?"

The man in the long coat made no reply, but came close up to the desk, laid one gloved hand on top of it, set the other to his hip, and looked down steadily at Dill.

He was a tall, slim, upstanding chap, with a pair of the most honest eyes that ever you saw in a man's head. For a long minute he stood there, just looking at the old lawyer. Dill, more than a trifle disconcerted with the prescience of trouble close at hand, took off his glasses, put them on again, fingered his gold watch-charm, and at last, as though with cheerful spontaneity, exclaimed:

"Why, bless my soul if it isn't Graham! John Graham, of all men! Well—well, John, my boy, what good fortune brings you here? Sit down, John. I was—ah—just about leaving for Beacon Street, you know; but my time's always yours. Take your coat off, John. Make yourself at home. What's new down yonder in Manhattan?"

He held out his hand to the visitor; a veined and rather flabby-looking hand, with more than one stone of price glinting on its fingers. But Graham ignored it. Neither did he take off his coat or make any sign of sitting down. Something in the pallor of his face, the tension of his mouth, the keen, blue light in his eyes, gave notice that he had come on no friendly visit.

Dill shifted uneasily in his chair and glanced at the clock, wishing himself well away. He had always regarded this young

man, who, until he had reached his majority three years ago, had been nominally his ward, with little more than the assumption of condescending patronage. Even the fact that Graham had, on his class-day eve, spoken right honorably for the hand of Agnes, had amused the lawyer, even though at the same time it had vexed him a trifle.

Old Dill had quite other plans in view than that his only girl should marry a portrait painter—"a mere dauber," as he called him. Bruskly, the lawyer had sent him about his business, anxious for more than one reason to be well rid of him.

For a year and a half he had seen nothing of Graham; had heard nothing of him, for, shrewd as he was, Agnes had been far shrewder. (What girl in love but can outwit her father in sending or receiving letters?) The lawyer, in a word, had all but banished Graham from mind; but now there stood the man, unwelcome as the devil himself, gazing down at him with a look that boded trouble in the wind.

"Why, John—ah—what's the matter now, my boy?" the old man asked again unsteadily. Many a time had he faced hostile juries, arrogant judges; but never had he felt the fear that this mute, accusing look inspired. "Can it be, can it possibly be?"—the thought flashed to him—"that he knows at last? Merciful Heaven, if he does—what then?"

Already half in a panic, he cast about him for a channel of escape. Out from the dark recesses of his mind fluttered evil memories, memories which he had hoped might never be evoked again. To cover his emotion he fumbled for his handkerchief, and loudly blew his nose.

"You scoundrel!"

"What?" cried the old man, starting half up as though by the force of a suddenly released spring. "What—what's that you say, sir?"

"I said 'scoundrel,'" answered Graham in a low, steady voice.

"Are you deaf, all of a sudden? I'll put sneak-thief and hypocrite beside it, and top off with liar! Is that language plain and simple enough?"

Dill tried hard to laugh, but it was a ghastly mockery of merriment. His face flushed red, then went sickly pale. Back into his chair he sank. The glasses fell from his nose. He did not pick them up; but sat there shaking as with palsy, utterly unnerved. The suddenness of the attack had found him off his guard for once. He crouched and

cringed a moment, rubbing his nerveless old hands together, a mean and pitiable thing.

Then he looked up, or tried to, for his eyes could not meet Graham's.

"You—you'd better go home, my boy," he stammered. "You're either deranged, or—ah—you've been drinking too much. In either case—"

Graham, his face a study of scorn, tossed his head up with a sneer.

"No," he answered, "I was never saner than to-night. As for your other assumption, that's as false as your own mask of respectability, you hound! I've come all the way from New York just for the pleasure of saying what I've said—and some more. I don't need any Dutch courage to help me face any man, least of all a man like you!"

The old lawyer, panic-stricken, foreseeing visions of he knew not what violence, glanced at the telephone that stood on his desk. Graham saw the glance. Quietly he reached over, seized the instrument and set it on top of the desk, out of Dill's reach.

"No," said he. "You won't use that, not yet a while. Not till you've heard a few things. Understand? If you were only thirty years younger, I'd whale you to a pulp before beginning; but, as it is, no; you're safe enough. You'll give me half an hour of your valuable time; though; yes, more, if I want it. You'll—"

The old man, reassured that no bodily harm was going to befall him, got back a tag-end of sneaking courage. He fumbled in his lap for his glasses, put them on, looked at the clock again, and stood up.

"There, now; that will do," said he. "I've heard quite enough, sir; quite enough! After the unwarranted insults and abuse that for some reason or other you've seen fit to heap on your one-time guardian and protector, a man old enough to be your father, a man who shared your father's confidence and who—"

Graham laughed outright, a bitter, insolent laugh.

"Why, you old gray wolf!" he said.

"Silence, sir!" cried Dill. "After such insults, rest assured that any hopes you may ever have had regarding—ah—my daughter—are quite futile. Quite so, indeed!"

Graham snapped his fingers. "I guess we don't—" he began, then checked himself. His powerful arms crossed on the desk-top, he stood there gazing at Dill with steady and contemptuous eyes.

The old man, his own master again, shrugged his shoulders and turned away to where his overcoat and tall silk hat hung be-

side the window. Graham, without a word, walked to the outer door of the office, locked it, and slipped the key into his pocket.

"I wouldn't put those on just now, if I were you," advised he. "You won't be going for a while yet, you know; and if you sit here all bundled up you might catch cold on the way home. Good advice, eh?"

The mockery of his tone stung the lawyer.

"Why, you insolent whelp!" he cried, in a thin, anger-shaken voice. "You'll regret this, young man; you'll certainly regret it. You don't know who you're dealing with, that's evident!" And at Graham he shook a long, big-knuckled, menacing finger.

"Don't I? Hm! Maybe. No matter; we're going to settle things right here and now. Sit down again, before I have to make you. Sit down, d'you hear?" he repeated, as the lawyer still stood there, an angry and impotent old figure.

He pointed at the chair before the desk. Dill made for a moment as though to brave him out, then yielded before the imperative eyes and gesture of the man.

"Thank you," said Graham satirically. "I thought you'd be reasonable. Now put your glasses on good and solid, for I've got something to show you. Here, have you ever seen this?"

From an inner pocket he drew something—a small, fat, leather-covered book—an old-fashioned diary, it seemed. Coming around the end of the desk, he threw the book down onto the blotter, where the light from above fell strongly on it.

"That?" cried Dill aghast. He sought to catch it up, but his fingers shook so that he had to try three times before he could hold it at all. "That? Oh, merciful Heaven, after all these—all these years? That? *That?*"

CHAPTER II.

The Old Diary.

GRAHAM laughed.

"Yes," he assented. "Just that. Nothing else. Not quite so high and mighty now, are you? Not quite so virtuous and insulted, old man? Recognize it, all right enough, eh? Oh, undoubtedly! Maybe I can shuck off a little of your smooth hypocrisy yet, like a peanut-shell, and throw it away. Get right down to the kernel of you, maybe—if it isn't too small and mean and wizened-up to see without a microscope!

"Open the book, man. Open it—read a little—it's interesting enough for even you!

Open it, I say! Why, what makes you tremble so? Ah, no you don't!"

For the old man, with a sudden, furious gesture, had jerked the book open, and, using all his strength, was trying to tear it in two.

Instantly Graham was upon him, like a lion on a jackal. Graham's powerful fingers clamped themselves round Dill's wrist; and, tug and strive as the old lawyer might, he could not so much as budge his hands.

"Oh—oh—let go, there, you ruffian!" panted Dill, purple with exertion and fury. "You're breaking my bones, I tell you! Let go!"

"When you let go the book, not before," answered Graham, his voice cold as steel. Dill's only reply was an oath, with new struggles to tear the paper; but now Graham's clutch tightened; his fingers sunk into the unwholesome white flesh of the lawyer, whose hands became livid and swollen.

"Drop that book!" exclaimed the young man. "Drop it, before I squeeze the very marrow out of you!"

"Darn you, but you'll smart for this!" snarled the lawyer, as his fingers opened limply, letting the book fall to the desk.

"I'll teach you to come into an old man's office and assault him! Wait—you'll see!"

Graham only laughed. "That may be a game," he answered, "that two can play at. What you'll do some time depends very largely on what I do now, you understand? On what I do to-morrow, and the next day. By the way, it isn't a bad thing to have a set of first-class fingers, is it? You used to sneer at me for my interest in athletics, back in college, I believe. But—well, it may come in handy, once in a while. No?"

Dillingham's only answer was an inarticulate growl, like that of a balked animal, as he sat rubbing and nursing his bruised wrists.

"Don't try that again, please, if you value your health," admonished Graham quite coolly. "I really advise you not to. You see, I wasn't really exerting myself then. Next time I might happen to forget myself, and—you never can tell what might happen. Now, then," and his voice changed suddenly to one of command; "now, then, if you're quite ready to talk business, why, so am I. Well?"

"Go on, blackmailer!" panted the lawyer.

"Blackmailer! I?" cried Graham, astounded. "Well, say, that is a good one! Blackmailer—ha! ha!"

Leaning one hand on the open book, he

clapped Dill on the shoulder with the other, till the old man's head wobbled and his glasses almost fell off again.

"Why, my dear ex-guardian, I beg your pardon," said he mockingly. "Among all your other admirable qualities I really didn't know you had that of a humorist. Black-mailer, eh? Capital! A regular *tu quoque* answer, well spoken! Come, let's shake hands on the strength of that. I'll forgive a whole lot for the sake of a good joke, upon my word I will!"

He extended his palm to Dill, but the old man merely recoiled, showed his teeth, and snarled for all the world like a trapped wild-cat. At sight of his look, Graham grew serious again, cool, collected, and determined.

"Oh, so there's nothing doing in that line, eh?" asked he. "Very well, we'll go on a basis of absolute hostility, if you say so. Now, this book here, this book—"

"Well, this book? What of it, fool?" spat the lawyer. "Wherever you found it, I don't know; but no matter about that. There it is. I recognize it. Your father's diary, yes. What of it? What are you going to do with it, now you've got it? What, I say?"

"Ah, now that," answered Graham, "is the most interesting part of all. Don't you wish you knew, you old badger? Better ask, what am I not going to do with it? I guess you've got sort of an idea what I'm going to do—unless you do what I'm going to ask you, and do it first—do it quick! A nice position it'll put you in, too; a truly eminent position. Pillar of society, and all that sort of thing, you know. Just shovel out the foundations with this little book, and 'Oh, what a fall was there, my countrymen!' I hope you understand me, sir!"

"What?" cried Dill. "Have you no shame, no sense of decency? When my daughter hears of this, from me—"

"You'll oblige me by not mentioning her here, if you please," exclaimed the younger man with sudden heat. "If she hears of it at all, it won't be my fault. Whatever happens, she'll be spared that, so far as I'm concerned. Heaven forbid that I should cause her a second's pain, even—even for all this means to me!"

"Be wise, I tell you. Come down, while there's time. Give in. Make good. I have no wish to take an old man and dangle him before the public as a symbol of dishonor. Much as I despise and loathe you, Dill, I'm going to keep this thing all dark, if you'll be reasonable. A little for your sake. One per cent, maybe. Ninety-nine per cent for

her! Now you know where I stand. Well, how about it?"

He drew back from the desk, folded his arms, and quite patiently, quite calmly, waited for the old man's answer. But if he expected the astute lawyer to give in for any such reason, he had misjudged him.

"So, then," whined Dill, fumbling with his glasses to give himself a measure of self-control; "so, then, you use her as a whip to beat me with? You—"

"Not at all," replied Graham. "I just put it up to you in a straightforward manner. Do you or don't you value that money more than you do your own good name and your daughter's peace of mind? Do you choose a quiet settlement, or do you prefer a scandal and a yellow-journal campaign, with all that that means? Now, that's the question before the house!"

"That book, curse it!" fumed the lawyer, evading the issue. "If it hadn't been for that! Why, I thought that was sunk in the bottom of Lake Barlee, forty years ago, along with—"

He checked himself, but Graham had caught the hint.

"Along with the rest of my father's things, all except the dust, you mean?" asked he, in a tone of such bitter and contemptuous scorn that even the time-hardened old rascal winced.

"You thought, I suppose, that nobody in this world would ever know what happened at Dundas Hill, eh? That the solemn oath you swore there, to use my father's share of the strike for my bringing-up, and to hand me the principal when I was twenty-one, wouldn't ever come to light? That when you sailed away from Fremantle in that old three-masted windjammer, the Pandora, and saw the coast of Australia sink down behind the horizon, you'd left every decency and obligation buried deeper than your partner's corpse? Ugh, you swine!"

Dill leered up malevolently at him. Gone now was every pretense and sham; the man's face had changed; new lines seemed to have formed in it. His eyes glittered like a cornered rat's eyes; and like a rat's whiskers, too, twitched his gray mustache. His shiny forehead was all beaded with sweat. His teeth, as he tried to speak, clattered together uncannily.

"You—you can't—" he managed to stammer.

"Can't what? Can't prove it, you mean? Oh, I can't, eh? Well, maybe I can't prove that somehow or other you made way with

my father, poisoned him, or something, for the dust; but no matter about that. I'm morally certain a strong, vigorous man such as he was didn't die, out there, without some help from you; and that sort of certitude is sometimes better than proof. I can't prove you were bushwhacking, either, but I'll just let that pass.

"What I can prove, and *will*, too, if your regard for—for Agnes isn't strong enough now to bring you to time, is that all these years and years you've—the money, I mean, hang you—the money—and—"

Graham, his self-control slipping away in spite of him, became half incoherent. He shook the old, tattered diary in Dill's ghastly face.

"I don't want to prove anything else, don't want to know, for her sake!" the young man rushed on. "But, by Heaven, the thing I do know has got to be made right, or—well, you just refuse, that's all, and see what drops on you; just try, and see!"

"Sh-h-h! Sh-h-h! Not so loud!" entreated Dill, glancing about him in a frightened way, all his aplomb and dignity quite vanished.

"For Heaven's sake, be reasonable! Just think what might happen if somebody out there in the corridor should happen to overhear you! Sh-h-h! Keep your voice down; that's a good fellow!" And he raised a thin, clawlike, tremulous hand appealingly.

"Oh, very well—as you say," answered Graham, pulling himself together with a strong effort. "I've got some common sense left, even yet, I guess. Though, when I first found that book in the old hair trunk that father sent home, just before you and he started into the bush—when I found it in the attic at Greenwood, well—I saw red for a minute.

"It's a good thing for you, all right, that you weren't there just then. However, that's over and gone now. I'm no fool to wreck my life and hers with any such cheap, spectacular business as revenge. It's *justice* I want now, and mean to have, and am going to get, hear *me*? Justice—nothing more, nothing less. That's all. Now things are up to you. Well, what say? Your move!"

"But"—and the old man forced a laugh through his pallid lips—"but, after all these forty years, more or less—bah! you can't prove it! It won't hold in law now. It's not actionable!"

"Oh, it isn't, eh? Well, look at this, will you, and this, and this!"

With trembling fingers he spread the old,

time-yellowed leaves wide open on the desk, thumbed them over, and found a certain place.

"Read that!" he commanded, tapping the page.

CHAPTER III.

The Gray Wolf Bares His Fangs.

"**R**EAD it?" quavered Dill, unstrung by the actual presentation, there before his eyes, of the dim writing traced so many years ago, so many thousand miles away, by a dead hand—the hand of a man who, could the departed speak, must so bitterly have cursed him.

"Read it? I can't!"

His voice sank almost to a whisper, as he sat there, sick and shaken, not with remorse, but with an agony of fear. Fear at thought of losing now the golden hoard which all these years had been his crowning joy—fear at the prospect of exposure, of disgrace. Fear—nothing else.

"I said, *read*!" dictated Graham again. "There—right there!"

A moment's silence, while the old man's eyes sought the place, and while the faded letters, almost illegible in places where the ink had changed, seemed to dazzle on his sight.

The busy clock on the mantel still kept on its cheery *tock-tick-tock*; against the window the snow still sifted down. From outside in the corridor came a rattle as an elevator door slammed shut. Somewhere a whistle blew, in the distance; others followed, high-pitched or low; and the clock, with a sudden buzzing, struck six times.

"Well, why don't you do as I say?" commanded Graham sharply.

The lawyer, as if rousing from a sort of stupor, focused his blinking eyes, and read:

FREMANTLE, December 2, 1887.

In at last, after three weeks of Hades. No luck, so far, but still at it. . . . D. is very hopeful. Says we must surely strike it if we leave the coast and head for the country over back of Glenelg and the Yilgarn Hills. He may be right; he always seems to be, in everything he says or does. One in a thousand, Dill is! . . . At any rate, nothing in the north country. Yarra-Yarra and the Gairder Range haven't shown us a sparkle of the yellow stuff. . . . I'm not feeling quite myself, these days. Seem to be losing strength, somehow, though why I can't say. Asked D. about it, this morning. He said he felt the same way, too, but I never saw him looking

better. Very cheerful he's been, of late. Astonishingly so, considering our infernal luck. Without him, what would I do? . . . God grant everything is right at home with Clara and the boy! My son! He must be over a year old now; y'es, a year and two months—and to think I've never even seen him—never had but four letters from Clara in all this time. Wretched service, abominable, down to this corner of the world. What a place for a man to be! But, anything, everything, if luck only favors and I can do the things what I want to do for them both! Heaven knows this hardship isn't suffered for my own sake. . . .

"There, now, enough for that," directed Graham. "Now see here!" He turned a dozen pages. "This," said he. Dill read:

KILGOORLIE, January 11, 1888.

Struck it at last, by Heaven! Rich? Oh, beyond the wildest dreams! The stuff lies thick for half a mile all up and down a little unnamed brook draining into Lake Lefroy. No digging. Just cradle it right out of the shining sand. . . . The buckskin bags are heavier, heavier, each evening. Oh, such success! If only Clara knew! Now she and the little chap are safe, whatever happens. . . . I feel singularly weak, it seems to me. Continual headache; sometimes nausea after eating. If it weren't for Dill, now, I'd be lost. He keeps well. . . . Sometimes I seem to have forebodings. . . . But if anything happens, he'll stand by. With such a man to leave things to, trust Clara and the boy to, why need I fear? A truer comrade never breathed. . . . Ah, this cursed land of deserts, hills, maddening sunshine, drought! What wouldn't I give for just one sight of the States again—of them? . . . Next week, after the clean-up here, we leave for the East Murchison fields, beyond Lake Bailee and Spinifex. Great things hoped for—greater still! Then—

"Go on," Graham ordered, for the old man, blinking and stammering, hesitated, and made as though to stop.

"Go on? Now—ah—be reasonable, can't you?" asked Dill. In his cracked voice sounded an undertone as though of returning courage, almost of jubilation. "How can I read? Don't you see for yourself it's almost illegible? Faded so—and dimmer, dimmer, the farther it goes!"

He turned a few pages more. The writing toward the end of the book became, in fact, not only weaker and more irregular, but so pale that only here or there a word appeared at all. The lawyer's eyes sparkled with secret joy.

No one knew better than he how much de-

pended on this fact. It gave him fresh hope, new stamina. But he was far too wise to voice his thought—the thought that, after all, Graham might not know the whole truth in all its blackness—the size of the fortune he had been robbed of, the actual status of affairs. Too old he, in the usages of plot and counter-plot, in the finesses of deception, to have lost hope even yet. So, with sudden inspiration, he looked up at Graham, and, with a voice seemingly tinged by the honest vibrations of remorse, asked:

"Why go on? Why, after all? I am an old man. You're young. Life's still before you; it's mostly all behind me. Suppose now that I should—ah—consent to your marrying Agnes? Would—"

"Would I drop this, *Shylock*?" cried Graham. "'My daughter! O my ducats! O my daughter!'" he quoted scornfully. "So, that's your much-boasted love for her, eh? Faugh! Don't you ever say a thing like that again to me, you hear? Never! What? Would you trade and barter the girl like a Kaffir selling a fattened daughter for so many cattle? You outrageous cur!"

"But—wait—hear me!" exclaimed the lawyer, a flush mounting to his withered cheeks despite him. "You misunderstand. Suppose, at the same time, that I—ah—admit, you know—"

"Admit? What else can you do but admit it? You've got to!"

"Admit," resumed the lawyer, bowing his head and secretly cursing his inability to squeeze a tear from his dry eyes—a tear that might drop effectively on the blurred page. "Own the wrong. Repent. A great word that, repent—ah! Never too late for grace, my young friend, however black the sin. Never too—"

"Cut that!" Graham snapped. "I don't want any of your driveling cant this time. I've heard too much of that—far too much—already. I'm here to deal with facts to-night, not hypocritical speculations. Suppose I drop any action against you—not for your sake, mind, but hers—what then?"

"Then? Why, restitution, certainly, 'certainly, my dear fellow. Restitution in full!" exclaimed Dill, his heart swelling with a sudden crafty joy. "The original sum, of course, was—I mean, you know, it's in bonds at present. All secure. The very best. Trust me for that!"—And, with a chuckle, he rubbed his hands together. "Bonds. In my safe. With your permission, I'll show you, eh?" He nodded at the massive safe that stood in the far corner of the office.

"Go on; get them; let's see them," bade Graham. "It's a dirty business at best. I hate to touch or even see them; it's like taking blood-money—but it's mine, and I'm going to have it. If it wasn't for Agnes, I swear to you I'd have satisfaction out of you, too. You'd go up for this, so help me—but my hands are tied, by her. Thank her for that! Go on; bring them. Let's see the cursed things."

Dill stood up, adjusted his glasses, and walked slowly over to the corner. In his devious brain a plan had formed—was forming even now. Every second's respite was precious as diamonds to him. If he could only hold the young man there a little while, parley with him, delay him, he felt that all might yet be well.

Never had he faced a judge or jury when one-hundredth part so much had been at stake for him as now. He realized that this was a supreme crisis in his life; that every atom of his craft would have to come into play if he were to win out.

To his head he pressed a hand, and stood there a moment before the safe, thinking—thinking with feverish haste.

"Well, go on," Graham cried. "Why don't you open it?"

"Wait—wait just a minute, please," quavered Dill. "The combination—ah—all this unpleasantness has quite driven it out of my mind. Just a minute you'll grant me, won't you?"

"Think away. But, mind you, I haven't got all night to waste on you!"

Dill leered craftily to himself, his back turned toward Graham. Silently to himself he mouthed a curse; then, his plan full-fledged, knelt before the safe. With lean fingers he spun the knob, stopped it, turned it back again, and once more reversed. The wards clicked. He tugged at the handle. The heavy door swung outward.

"Presently, presently!" he exclaimed. A glance over his shoulder assured him that the young man still stood beside the desk, and that from there he could not see the interior of the safe.

Certain of this much, he quietly unlocked and pulled out a lower drawer. In it lay a blue-barreled revolver, fully loaded. With a dexterity that would have done credit to Hermann, he slid this into his breast-pocket, then shut the drawer again and locked it.

"No, not there," said he. "Let me see, now, where did I put them last? This discussion has quite upset me; bless my soul, but it has!"

Graham, exasperated almost to the limits of endurance, stepped over to him.

"None of that now!" he exclaimed. "That won't go with me, you know. Come, produce them! I haven't any time to lose! You hear?"

"Why, how impatient we are, to be sure!" retorted Dill, his courage strengthening every second now. "Surely you wouldn't hurry an old man—old enough to be—"

"I'll give you just two minutes by that clock!" Graham interrupted. "After that—well, I won't guarantee anything. If I did the right thing by you—hmmm!—go on, anyhow. Get them."

Dill opened another drawer. From it he lifted a large packet wrapped in lawyers' tape and sealed with wax.

"Ah, here we are!" he exclaimed, getting up painfully from the carpet and dusting off the knees of his well-creased trousers. "Now, then?" And, bowing to Graham, he gestured toward the desk.

Graham turned back toward it, automatically obeying the suggestion. A man less clever and astute than Dill might easily have shot him; but such was in nowise the old man's game. He knew a dozen tricks to beat that. All that he wanted for the moment was just to get Graham's eyes off him. And, as Graham turned, Dill stepped backward beside the safe. His arm went out. His hand sought and found the little knob of a messenger-call. Instantly he punched the knob; then, close behind the young man, came over to his chair again.

He sat down. Graham stood beside him, his face was pale, his eyes were like twin blue fires.

"Better draw up a chair here and make yourself comfortable while we settle things, hadn't you?" queried the lawyer, with mock hospitality.

Graham made no answer, save, "Go on! Open them!"

"In a minute—ah—certainly, yes, yes, indeed," said Dill, now sparring for every second's time. "Lord bless me, but they're tightly sealed, though!" And he made as though to break the wax. But, before he did so, he looked up again.

"The amount?" asked he. "Really, now, my dear young man, you haven't—that is, the amount, you know?"

"So! Forgotten, have you?" sneered Graham. "Mind, I'm not asking for a penny's interest. I don't believe in it, anyhow, and I wouldn't take it from you if I did. Just the original money; that's all. The sum

you took from my father, and promised on your word of honor—as though you *had* any!—to give my mother. Just that; not one cent more. Well?”

The lawyer, sweating now with a soul-racking eagerness to hold Graham off for just a few minutes more, took up the diary again, turned the pages toward the end, and seemed as though seeking to refresh his memory. But all the writing there, traced in a mere scrawl, had faded so that it was nearly undecipherable.

The last few pages, as he thumbed them over, showed only a pot-hook here and there. Dill's face hardened.

“So, then, is that all you've got to show?” he queried in assumed solicitude. “But, really, my dear boy—”

“Oh, you can't dodge that way,” cried Graham, holding his temper only with an effort. He fumbled in his pocket again, pulled out a flat package, ripped it open, and tossed down onto the desk a score or so of photographic prints.

“There! Look at those!” commanded he.

Dill took them up, and, with deliberation, studied one or two.

“You—you've—but how the deuce, man?” he blurted, for the instant startled out of his self-assurance. For on each print appeared a page of the diary, and its writing, though uneven, as if done by a feeble hand, was perfectly legible.

“Nothing simpler,” answered Graham. “Oh, I thought it all out in advance, never fear. I simply used a common method; took a half-dozen films of each page, laid them together, and printed through. A knowledge of photography isn't such a bad thing, after all, eh? Yes, Dill, I've got the goods on you this time. See there, for instance? Read that!”

He tapped one of the prints. The lawyer, amazed, yet still intent on using every possible moment of time, read slowly:

MURCHISON, February 20, 1889.

I know, now, that the end is near. D. is all kindness and encouragement; he tells me I shall be myself again, once we get out of this blazing Gehenna, but I know better. Something tells me I never *shall* get out. . . . Well, a man can do no more than meet the inevitable bravely. Thank God the end has not drawn near without my having at least won a prize—what a prize! We weighed out the dust yesterday, last night, crouching in the tent, by lantern-light. Four hundred and sixty thousand dollars, so far, between us. My share, then, two hundred and thirty thousand dollars! What will Clara say when D. gives

her that? . . . For he has given his word, and, his hand to it, that he will faithfully carry out my wishes—look out for the wife and the little chap—assume—

Dill broke off sharply. In the corridor sounded the opening, the closing, of an elevator. Steps came quickly along the hallway.

“Go on!” commanded Graham.

Dill, in a gasping, nervous sort of voice, resumed:

—the guardianship and the protection of—

A hand fumbled at the knob of the outer office door. Graham, with an exclamation of impatience, half turned toward it. Then he remembered that the door was locked and that the key lay safely in his pocket.

“Never you mind about that!” said he angrily.

But Dill, this time, did not obey.

Some one was rapping, was shaking, the door.

“Say, are you going to read, or not?” cried Graham.

Dill, suddenly defiant, stood up. Over into the back of the desk he swept the diary and the prints.

In Graham's face he snapped his fingers, then, with a loud voice, shouted:

“Not one cent, you dastardly blackmailer! Kill me, if you will, but not a penny—not one!”

“You mean—” began Graham, flushing with passion.

“Help! Help!” screamed Dill, throwing into the cry a shrill note as of deadly terror.

And, before Graham could move or speak a word, he flashed out from his pocket the revolver.

Graham saw it, and struck out; but not before the lawyer had pulled the trigger. Not at Graham, though, Dill shot; only straight down at the floor.

The explosion crackled and rang trebly loud in the confined space.

“Help! Oh, he's—he's killing me!” roared Dill, as Graham closed with him.

Other footsteps clattered along the hall.

Then came a crashing of glass, a thunderous shock against the door, and in burst, staggering, the elevator-man. Behind him, pale and staring, peered a blue-clad messenger-boy.

“Help, here! Murder!” howled the lawyer.

A sudden weight flung itself on Graham's broad neck.

Graham, Dill, and the elevator-man all went down together by the desk in a fighting tangle.

CHAPTER IV.

Whipsawed by Fate.

MADDENED beyond any human limits of endurance, Graham wrenched himself free, and staggered up; but again the elevator-man came at him, with his fists swinging.

Graham ducked the blow and landed hard on the man's jaw, driving him back, an instant. But now Dill was up. With surprising strength for so old a man, the lawyer snapped the messenger-boy round by the shoulder, cried "Run! Police!" and sent him flying toward the door. Then into his pocket he crammed the diary and the photographs. Graham caught a glimpse of this; of the old man striking his own face twice, thrice, with all the force of his clenched fist. But, beyond this instantaneous glance, he had no time to notice anything. For now the elevator-man, mad clear through and lusting for battle, drove at him again.

Graham tried to parry; but his long, wet ulster hampered him. He dodged back, stumbling over something. Dill kicked his shins viciously. Before he could pull together, the Irishman had landed a bone-breaking upper-cut. Graham fell. His head went crack against the corner of the desk.

"Here, hold on!" he tried to cry. "Let me explain—"

But suddenly everything seemed to spin round and round. The light dazzled in his eyes. Everything got black. A roaring filled his ears. All that he knew was that something brutal had him by the throat—that he could not breathe—that all his strength was ebbing, ebbing—that his lungs hurt him savagely. Then—nothing.

Consciousness dawned again with the feeling of some hard, cold substance on his wrists.

Feebly he blinked his eyes open, still trying to understand just what had happened, just what it was that hampered his movements. He sought to move his hands, but could not. He swallowed hard. It hurt him cruelly. His throat was lame and sore and bruised, and through his head shot brutal pains. On his forehead something warm and sticky seemed to be crawling—something that half-blinded him.

"I—I—let me explain—" he stammered

again thickly. An oath and coarse laughter answered him. He felt himself being raised and shaken by the arm. Then all at once he perceived that he was standing limply in the middle of the office, hands manacled, with a couple of policemen gripping hold of him as though their very lives depended on the flesh-bruising intensity of their hold. One of them had a night-stick raised.

"Well, d'youse want any more?" gibed he. "If youse do, sure an' I can give it to ye, good an' plenty! Or will youse coom along now an' make no more trouble, hey? Speak up, or by Heaven I'll give youse somethin' to loosen yer tongue!"

Graham, not fully sensing as yet just what had befallen, turned on the man as though to answer; but the other cried, "Aw, cut it out!", and shook him roughly. A voice said:

"I think he'll go now, all right enough. But—ah—bless my soul—what a beast! On my word, man, in all the years I've—ah—dealt with crime, I've never seen his equal. He—"

"You lie, darn you!" cried Graham. "You—" But a big fist, shoved into his face, choked further utterance. Graham, vaguely conscious of a growing crowd in the office, of eager and wide-eyed faces peering at him as though from a great distance, of a buzz of conflicting voices, lapsed into silence. He closed his blood-clogged eyes and stood there, limp, sagging, as in a horrible nightmare.

"You see for yourselves," he heard Dill's voice go on. "Just—ah—take note now, will you? My clothes torn, face bruised in three places where he hit me; and the bullet-hole in the carpet, here, where he shot at me. If I hadn't been quick and wrenched his wrist aside, he'd have struck me dead right at my own desk. A brutal, cold-blooded, and premeditated assault. He, of all men! My former—"

"His own—gun!" panted Graham, forcing his eyes open more. "He fired it himself! I never—"

"Shut up!" roared the fatter of the two policemen.

"Stand back, you!" cried the other, driving the crowd out toward the door. "W'at business youse got here? Git out!"

Roughly he pushed the curiosity-seekers back. Through them came elbowing another policeman, purple-faced and short of breath, bursting with self-importance.

"Ah, lieutenant!" Dill exclaimed. "Glad you're here! A bad case—very!"

As though exhausted, he sat down heavily

in his chair and leaned his head on his left hand. The right he extended to the newcomer.

"I congratulate you—ah—on the splendid service of your men here," said he. "Without them this fellow would have murdered me in cold blood, here in my own office. I'll bear them in mind, Flaherty—yes, and you, too. Bless my soul but I'm glad to see you, though!"

Flaherty, foreseeing rich visions from the gratitude of a man so closely bound with corporate interests, and politically so potent, puffed up even more.

"Public duty, sir; that's all," he answered, twirling his red mustache.

"Hold him fast, men! You'll make a charge, sir?"

Dill pointed at his self-bruised features, then at the disordered room, the torn clothes of the elevator-man who stood brushing himself near at hand, and finally at the scorched hole in the carpet. He nodded toward the open safe.

"To-morrow morning I'll appear against him," he answered. "Till then—" and he finished with a wave of his hand toward the door.

"Run him in, b'ys!" commanded the lieutenant.

The two policemen, jerking Graham roughly, started away with him. The young man caught a glimpse of himself in a mirror that hung between the windows. For an instant he could not realize that it was himself he saw. His hair disheveled and blood-stiffened, his forehead smeared with blood, one eye blacked, his throat swollen—he made a hideous and grotesque appearance.

"Oh!" he cried desperately. "Hold on—wait! He—he fired the—shot! I only wanted—"

Dill stood up suddenly, and interrupted his halting utterance with:

"You hear? If that isn't insanity, or worse, I'd—ah—like to know what it is!" The old man, still shaking and trembling, seemed to grow black with indignation.

"Mark well, lieutenant, what he says! Every word!"

The crowd, jostling and surging, growing momentarily greater all down the corridor, set up a jeer. Graham heard catcalls and derision. Twisting around in the grip of the officers, he faced the many-headed beast. At it he shook his manacled fists.

"He did it, I tell you!" he cried. "I never saw the pistol in my life till he drew it on me!"

Dill laughed, then—a mocking and inhuman laugh.

"Search him!" he snapped curtly.

Flaherty stepped to Graham's side. Into the ulster pockets he slid his hand. He fumbled a second, then drew out a key.

"There! See that?" exulted Dill. "Locked the door, you notice, so there'd be no interference!"

"Faix, an' it was locked!" spoke up the elevator-man, proud of his momentary importance. "I had t' bust her in, so I did." He gestured at the shattered panels.

The lieutenant nodded, smiled, and slipped the key into his pocket. "Exhibit A, all right," said he.

Then he went on with his search, while the crowd gawked and pushed.

Graham, head up, dazed senses only half pulled together as yet, stood unresistingly, when suddenly he jerked back in alarm.

"What? What?" he shouted.

Flaherty had drawn from the right-hand ulster-pocket a blue revolver. Its barrel was fouled. Flaherty spun the cylinder. One cartridge had been exploded.

"Sure, I guess that settles *you!*" laughed he. "Exhibit B—oh, yes! You're done, me buck! Come on, now, b'ys—off wid him!"

"Why, he—he must have put it in there himself!" shouted Graham, beginning to tug and strain at his bonds once more, now wholly maddened.

But Dill, with a sneer, turned to Flaherty.

"You see for yourself?" asked he. "Do your duty—clear this office—take your prisoner! You'll see me in the morning at the station-house."

Clubs menacingly in air, the policemen drove the crowd like sheep out into the hall and along it. With them they dragged Graham, still struggling, while the onlookers giped and hooted—some seeming to find humor in the situation.

The office was clear at last, and the broken door shut. Nobody now remained inside but Dill, Flaherty, and the elevator-man.

"Oh, you?" said Dill. "I mustn't—ah—forget *you*, my brave fellow! Courageous—very!"

From his wallet he drew a thick fold of bills, skinned off a yellowback, hesitated, replaced it, and took a V. This he handed to the Irishman.

"There, there; you needn't thank me, my man!" he hastily exclaimed. "It's I that ought to thank you. I'll remember you—"

later. Only for you, where mightn't I be now? An excellent chap, this," he added to Flaherty, while the man, intensely flattered, threw out his chest and squared his shoulders.

"We mustn't forget him, by any means, eh? He'll be my chief witness, of course. You'll take his name?"

The lieutenant nodded, brought out his note-book, and wrote down the man's name and address.

"Now," said he, "youse can go. Just remember how it all was, and kape a close mouth, and you'll be all right—see?" He winked at the Irishman, who thankfully withdrew.

"Now, then," said Dill, "suppose we go inside?" He pointed toward the inner office. Flaherty and he locked themselves in. Both men sat down.

"Bless my soul!" ejaculated the lawyer, as though trying to collect himself. "There was—ah—there was a messenger-boy, too. We'll have to have *him*." He swabbed his forehead, which was really sweaty.

"I'll locate him, sir; never fear."

"Then the key, the pistol—and look here, will you? Here, and here?"

He pointed at the bruises on his face, then exhibited his wrists, still discolored by Graham's crushing grasp.

"Faith, but he was the divil an' all, wasn't he?" exclaimed Flaherty, genuinely impressed.

Dill nodded.

"I hate—ah—to admit it," he answered. "But—the facts, you know; the facts. And, too, that bullet-hole there—"

He glanced slyly at Flaherty as the lieutenant knelt to examine the perforation. Then he reached for the telephone, rang up his house, and told the maid to inform his daughter that a little unpleasantness had occurred, but that it was nothing serious, and that he had taken no harm. Above all, he commanded that Agnes should not worry. He could explain everything, he said, in a few minutes when he reached home.

For nearly half an hour the lieutenant stayed with Dill. Reporters knocked in vain. None were admitted. All had to content themselves with hearsay and the wreckage of the outer door. They made the most of the material at hand.

Dill was late at the meeting of the Bay State Charitable League. His face was black and blue in three places, and his wrists swollen; but the society had never listened to a finer or more humanitarian speech. They

applauded it to the echo. Rumors of the trouble had already begun to leak out, and Dill received a score of solicitous inquiries, as well as great praise for his nerve and splendid courage. Nearly every paper in the city, realizing the news value of the speech at such a time, covered the meeting.

Long before it had broken up, John Graham had been booked at the Lagrange Street Station. The police-reporters covered that, too. On the blotter they read the entry: "Assault with a deadly weapon, with intent to kill."

Newspaperdom licked its lips. Simon Dill, lawyer, capitalist, philanthropist, politician, on the one hand; on the other, a protégé of his, an artist, a Harvard man, with a charge against him that, according to the statute-book, might mean twenty years in Charlestown—what more could the men of pad, pencil, and imagination long for?

Wires buzzed on the case that night, and typewriters clattered about it in the rookeries that pass for newspaper offices along Washington Street. The linotypes, slug by slug, clacked out all that was known or surmised or—invented. Life, activity, joyful anticipation there.

But, on the edge of his bunk, in a dark cell, John Graham sat all night long, his battered, wounded head gripped between his hands.

In his heart the blood had turned to gall. Into his mind had been beaten a knowledge, an understanding of some things that not all of us are given to know. With these, too, a scalding bitterness beside which fire is cool, and aloes nectar.

The long, pale, winter dawn grayed through the bars of the station at last; but still he sat there, motionless.

"Twenty years?" he breathed chokingly. "Twenty years? My God! It may be twenty years? And I—I have—no proof, no witness—nothing? Twenty years?"

Before him rose a vision of Agnes, whom now he felt he had irretrievably lost—Agnes, as he had seen her last, sweet, gracious, kind. And through his clenched fingers the tears trickled slowly, falling upon the cold stone floor.

CHAPTER V.

Doubts Unsatisfied.

EARLY next morning Graham was taken to police headquarters. There, despite his futile protests, he was "mugged" and

had his Bertillons taken, —as well as his finger-prints—three sets; the first, individual impressions of the thumb and left-hand fingers; the other two, simultaneous impressions of the finger-tips of both hands.

The preliminary hearing before Police Judge Sweeny was very brief. Graham, ghastly, bruised, and broken, merely had to face Dill for a few minutes. The old lawyer testified remarkably well for a man with the indications of having been manhandled that he had to convey. Sweeny took but little evidence before stating that probable cause existed, and that Graham was bound over to the Superior Court to await the action of the grand jury. He fixed the bail at \$25,000, in default of which he committed Graham to Charles Street Jail. The old lawyer bowed and took his leave.

Graham, that forenoon, had two visitors. From the bottom of his heart he was thankful that his mother was not living to suffer the shock and horror of this tragedy. The blow, he felt, would certainly have killed her.

"I'm alone in the world, anyhow; there's that to be grateful for," he said through the bars to Martin Stone, the first of his callers. "You, old man—I hope you aren't going to mix up in this thing and queer yourself for me?"

"That's just precisely what I came for, Tad," Stone answered with a smile. "I got just one peek at this thing on the Herald Square bulletin-boards last night, after the show. Rushed Ethel and her mother home in C.Q.D. time, jumped the midnight, and made Marathon time to the Hub. I don't know the ins or outs of this, and I don't want to, yet. All I know is that you're in bad, and that my place is here. I guess that's enough for now!"

Graham bowed his head against the iron.

"I—I can't let you," said he brokenly. "Just because we roomed together at Stoughton, that's no reason you should wreck your—you understand—future in the law, and—all that."

"Rot!" ejaculated Martin. "I'm your counsel, now, by right of eminent determination. Even though I might as well tell you I don't believe I can scare up the bail, I can get on the job and stay there till we have What's-his-name beaten to a fine froth. No, you needn't go into any details, not just yet. I'm going to wait till you pull together a bit before we get down to business.

"I know him, and I know you, and that's all I need for the present. You just tie to

me, that's all. The only thing I'm sorry for is that the grand jury won't sit for a couple of weeks yet. You'll walk out of here a free man, once it does. But till then, of course— A fortnight's nothing, though! Buck up!"

Graham stretched out a shaking hand, but the guard motioned it back. Stone laughed in the man's face.

"Oh, afraid I'll hand him a file or a bottle of 'peter,' or something, are you?" he queried. "Desperate pair of crooks, we are, eh?" Then, to Graham:

"Now, Tad, you just sit tight and don't think. Don't try to figure this thing out. I'm here, and that's enough, if I do say it. Two, with the right on their side, can lick—but there, that sounds like moralizing, so I'll cut it. I'm off now to see Barnard, up in Pemberton Square. We'll both be in this P.M. So-long, and keep your lip stiff. Don't talk. Good-by. All this will come out in the wash—you wait and see!" With a buoyant laugh, a hearty wave of the hand, he was gone.

An hour later Agnes came.

"John—boy—oh, what—what does this mean?" was all that she could manage to say at first, as she stood there holding to the bars. A brown chiffon veil hid her face; but only too well did Graham know her voice, her figure, her slim, gloved hands.

"You here?" exclaimed he, staring at her. "You?"

"Don't!" she pleaded. "He mustn't know! I got out this morning in the motor, shopping. Promised I—wouldn't—you understand. Left Edwards with the machine, waiting outside a drug-store two blocks away. Went out a side door—came here—mustn't stop more than five minutes. Can't! But, tell me—"

Graham steadied himself, stepped close up to the grill, and in an even voice said:

"Listen!"

"Yes? Yes?"

"Something terrible has happened. Something I never thought of, or foresaw—something I never so much as dreamed could happen! No, not what you think, though. Not that!"

"But what, then? He—"

"I understand. Of course, that's quite natural. But remember—and now I'm going to give you straight talk, as though you were a man—remember, that so far you've heard only one side. Seen only one—just one. Naturally—"

"So then, you didn't?"

"No. Not what you think I did. It's hard for me to stand here and say that your father—your father—"

The girl nodded. "This is straight talk now, John!" said she. Her voice had become almost inaudible. John saw her tremble.

"Yes. Well, then, you haven't got the facts. Not as they were. I—he—"

"Go on! Tell me, for Heaven's sake! All I'm praying for now is just a chance to believe you!"

"You're getting all wrought up, little girl. This isn't right. It's making you suffer. You—"

"Go on!"

"Well, I did go there, then, to ask for—"

"Money?" groaned the girl.

"Yes."

"So it's true, then, after all? Oh!"

"Not as you think it. I had a right to ask! It—no, I can't tell you—not just yet!"

"Can't you tell me, John?" Her voice took on a different timbre. Graham felt the note of unwilling suspicion. He writhed, but held his impulses in check. Better, a thousand times, he thought, to wait for the vindication which Martin had assured him of, than of his own accord to fling back accusation at the father of the girl he loved. He bit his tongue to keep back the words that were crowding for utterance.

"You locked the door?" asked Agnes presently.

Graham nodded. "I had to," answered he. "Had to. Otherwise he wouldn't have listened."

"You threatened him?"

"Not with force. Merely with—" He would have said "exposure," but that word, too, he checked.

"Not with force?" repeated Agnes incredulously. Graham saw that inch by inch her faith in him was ebbing out, as the tide ebbs on a sandy shore.

"Not with force? Why did you strike him, then? Why did you strike him, an old man—my father?"

"I? Strike *him*? But—"

"His face proves it!"

The prisoner groaned. To him flashed the remembrance of how Dill himself, with clenched fist, had done that damage. But, at the same time, he realized the futility, the utter absurdity, of asking the girl to believe it. So all he said was just:

"No, Agnes, I never struck him. I'm as

innocent of that, so help me God, as of the charge itself that's brought against me. I can't explain, just now. Can't! For your own sake! You must just take my word. Believe me, trust me! If you can't do that, then there's no use my telling anything more."

Instinctively he felt that his appeal did not convince. That, rather, she took it as a sign of weakness, perhaps of guilt. He passed a hand over his maimed face, as though to hide it from her questioning eyes behind that veil which shut her away from him.

"You don't—you can't believe me?" he questioned wearily.

"How about the bruises on his wrists?" she queried, evading him. "The pistol? The shot?"

"I had to hold his hands, that's all," said Graham. "He was going to tear up—something. Something of great value to me—to us!"

"What was it?"

Graham struggled to keep himself from bursting out with the truth, with damning accusations which now, he knew, could do no good, could not be proved, could only harm the girl and cause her suffering.

"I can't tell you—yet," he answered. "Some time—when I'm free. Not now!"

"It must have been a thing of very great value indeed," said she slowly, in a tone that voiced more loudly than any words her growing incredulity. "Of enormous value, to have made you shoot! Oh! How could you—you—do a cowardly thing, a brutal thing like that? When I think of it—"

"Agnes!"

She did not answer, but drew away from the bars and turned as though to go.

"Listen to me!" he commanded sternly, bracing himself against the sickness that all at once leaped through him, made him sweat and tremble, as he realized her thought.

"Listen, now! That pistol, I swear to you by—by all we've ever been to each other, by my honor, by yours!—I swear I never saw it in my life till your father drew it on me! He fired it himself, down at the floor. He—"

But Agnes, with a cry, exclaimed:

"No, no! Impossible! Don't ask me to believe such absurdities! What? When I come here, hoping, praying you can explain, willing to be convinced, eager to be, you tell me things like these? You give no explanation! You—"

"Explain? God help me—I—I can't—without—"

She shook her head and started to move away. John heard her breath catch, as though the tears were starting.

"Only believe me, trust me!" he exclaimed. "Some day I can tell you, tell you everything—you'll understand!"

"Till then, good-by!" her voice came to him, as from a long, long distance. Half maddened, he dashed himself against the steel, slid, sank to his knees on the stone pavement and remained there, his hands clutching the bars, all but fainting.

An iron door clanged. Agnes was gone.

With a sharp prod in the ribs, a guard roused Graham, and then, when he had staggered to his feet, thrust him back into the corridor leading to the cells.

A warder led him away, trembling and dazed. With a slam and a grating of metal, he was locked in his cell once more.

CHAPTER VI.

"Buried."

IN spite of Martin Stone's brave optimism and all the activities of Barnard, the grand jury at its sitting reported an indictment and placed the case on the trial-list of the Superior Court of Suffolk County. Stone had never been admitted to the Massachusetts bar, and could act only as an adviser and a stimulus to Barnard.

Though Barnard, when in the law school, had once chummed with both Stone and Graham, and was therefore now prepared to try every expedient for the release of his friend; and though few lawyers of the younger generation in Boston were equipped with greater shrewdness or skill, yet the fact that he stood on the wrong side of the political fence militated against him.

He was blocked, harassed, and in devious hidden ways impeded. For Dill stood as "right" as he did "wrong" with the hidden forces of the city's life; and where he could pull one string, the opposition could draw in a handful. So Graham, his reputation now shriveled and blighted by the scorplings of the press, continued in jail, waiting for trial at the April term.

Agnes did not come again. After the first fever of notoriety died down, almost nobody except Stone and Barnard came; and Stone could visit him but once a week or so, when he could get away from business.

He was arraigned before Judge McCafferty in the vast, gloomy county court-house in Pemberton Square, on January 20,

and went through the formality of pleading not guilty. After that, nothing to look forward to till the trial itself should come with the tedious, maddening passage of the interminable days. Winter's snow gave place to the slush and mud of spring; the elms on the Common began to burst forth into leaf, as the sun, day by day, rose higher; the sparrows twittered, courted, nested by thousands in the tall trees of King's Chapel churchyard; Easter came and went, with its message of the year's new life, but still he waited.

Newspaperdom forgot him, for a while. There was nothing of public interest now in the high-bred, keen-nerved, sensitive man caged up like a zoological specimen, fed on swill, subjected—even with no crime proved against him, even with the legal assumption of his innocence intact—to the base rule of institutionalized hulks of humanity coarsened in every fiber beyond all possibility of heart or feeling, beyond all things save low and petty despotism.

The world forgot him—but he did not forget the world, or Dill, or the real reason of his being there. Forget? Does one forget a branding-iron, white-hot, keen, pressed down each day deeper, deeper, into one's scorching flesh?

Outside interest revived a little as the trial approached. When it was definitely scheduled on the calendar, when the day and hour was set, jury impaneled, forces all lined up on either side to damn or save him, then did the reporters begin to write again on rickety, pale-inked newspaper typewriters, and head-lines to blossom out once more. The public mouth, always gaping, began to water for the tidbits of a blackmail case.

The case came to trial before Judge McCafferty, who, though weak on law, was strong on feudal allegiance to the powers that had made him. Dill was among those powers. McCafferty had helped him kill a bit of employers' liability legislation, so now he sat upon the bench. This fact, though known in Newspaper Row, somehow or other never yet had got itself into print, nor did it now. But columns, pages, were filled with the testimony of the two policemen, the lieutenant, the elevator-man, the messenger-boy, and Dill himself. Graham's testimony, too, was given, but it was very brief. There was no other witness for the defense.

Barnard was beaten from the start. He could tell by the look of the jury as, sitting beside the wan and haggard Graham, he conferred with the no-longer hopeful Martin Stone in the packed court-room, just how

little chance there was for a man in Graham's position.

The character of the complainant was brought out powerfully by the district attorney in his opening. All the witnesses for the State told strong, connected stories. Barnard understood how carefully they had been coached. His heart sank; and Graham turned a shade whiter than even before, as they heaped Ossa on Pelion. Dill's own story, concise, circumstantial, positive, delivered as though totally without personal animus, but, rather, with reluctance, capped the climax.

"Mr. Foreman," asked the clerk, when the jury returned, in an even, time-worn voice, more toneless than a phonograph's—"Mr. Foreman, have you arrived at a verdict?"

"We have."

"What say you, Mr. Foreman?"

"The jury finds the prisoner guilty as charged in the indictment."

"This bein' the only case ready for disposal this afternoon," said McCafferty, anxious to get out to the South End grounds before the end of the game, "court is adjourned until to-morrow."

He rose fatly, gathered up some memoranda, and retired into his little dressing-room. The jury, in charge of an officer, prepared to go back to the hotel. The public jostled out. Reporters surrounded Dill. Everything was confusion.

"Come!" said a sheriff, touching Graham on the shoulder.

The young man started, looked around him as though startled from a dream, and got up slowly from his chair. He looked a full decade older than on the night of his arrest. His face was thin and deep-lined; his hand shook; his shoulders seemed bent as by a great weight. Stunned, he waited. The sheriff had to take him by the arm and lead him away.

Barnard was only mute. He only pressed his hand to his eyes a minute, shook his head, and swore a frightful oath under his breath. But Stone, with a ghastly mockery of a smile, exclaimed:

"Buck up, old man! We'll file a motion for a new trial right away. You're a long way yet from being sentenced! Never say die!"

Graham turned on him a lack-luster gaze, shook his head, and made no answer. The officer urged him along; separated him from his friends.

"See you at Charles Street, just as soon—

as possible," gulped Stone. He sat down heavily and hid his face in his hands.

"So this is—justice!" he exclaimed.

The motion for the new trial was promptly overruled, and on the last Friday of the month Graham was brought up to the courthouse again, with a miscellaneous lot of offenders, to be sentenced. That was a job McCafferty enjoyed—dealing out penalties, one after another, like a country school-master using the birch. Puffed with a sense of power, he sat there, surveying the wretches huddled before him in various stages of poverty, misery, and distress, and served the masters who had put him where he was.

One by one the victims stood up, as the clerk called their names, and listened to the few brief words that sealed and bound the knots of fate, words impersonally spoken by the clerk who served as proxy for the court. Rare sport, indeed! McCafferty enjoyed nothing better, save, perhaps, a quiet game of faro-bank in Bosworth Place, or a fast "go" at the Grapevine A. C. Rather a sporting luminary, he.

"John Graham!"

John stood up and faced the court. He looked far cooler and more collected than at the time of the trial. A new expression had come into his face—a quiet, even gaze; rather hard, but confident. He waited, self-possessed.

Through his mind was running the phraseology of the statute, learned long ago by heart, his constant comrade by day, by night, for weeks and weeks, that seemed to stretch back into eternity: "Whoever, being armed with a dangerous weapon, assaults another with intent to rob or murder, shall be punished by imprisonment in the State prison, not exceeding twenty years."

"John Graham!" said the clerk again, squinting near-sightedly.

"Yes, sir."

"Because of mitigating circumstances and the purely circumstantial character of the evidence, the court is inclined to leniency. It is the sentence of the court that you serve an indeterminate term, not to exceed five years."

"Thank you," said Graham, unmoved.

That afternoon he was taken in the prison-van to Charlestown, booked, shaved, bathed, given a close hair-cut, dressed in the coarse gray woolen suit of the Massachusetts convict, and, under the number of 2704, was assigned to a cell on the third floor of the western gallery.

(To be continued.)

The Fine Art of Running a Freight.

BY CHARLES FREDERICK CARTER

JUDGING by the fuss that is made over them, it might be inferred that if one of those sumptuous through passenger-trains were to skip a trip this old earth would stop turning over, and we would all go straight to the demnation bow-wows. On the contrary, it is much more likely that if all the passenger-trains on earth were suddenly deprived of existence, all the railroads would continue paying dividends. For it is not the much-advertised passenger-train that earns the money, but the lowly freight which sneaks out into the darkness after the Pullman passengers are asleep, and rounds up the revenues in its modest way, never letting anybody but the auditor and the treasurer know what it is doing. It is the working-bee in the busy, bond-making railroad world.

In Handling*the Freight Traffic of This Country, the Railroads Have One of Their Greatest Problems—How Time Is Made, the Biggest Trains, and the “Red Ball” Specials.



ACCORDING to reports made to the Interstate Commerce Commission for the year ending June 30, 1909, the passenger earnings of the railroads of the United States aggregated \$564,302,580, while the freight earnings footed up the grand total of \$1,682,919,304. That is, the freight department earned three dollars for every dollar earned by the passenger department; or, to put it more precisely, the freight earnings constituted 68.88 per cent of the operating revenues, while the passenger earnings were only 23.09 per cent, the remaining 8.03 per cent being earned by carrying mail, express, etc.

Going back to the year-1908, for which more detailed information is available, it is found that the miles run by freight-trains aggregated 589,323,097, and the miles run by passenger-trains 510,699,062.

While the mileage of the passenger-trains was nearly as great as that of freight-trains, the difference in earnings per mile run by

the two classes of trains is startling; for the freight-trains earned \$280.15 per train mile, while passenger-trains earned \$112.63.

Yet, the petted and pampered passenger-train had such tremendous advantages that the freight would have been warranted in refusing to enter such a one-sided competition.

The average pay for hauling one ton of freight one mile was *seven and sixty-five hundredth mills*. Now, the average passenger paid just under two cents per mile in 1908; and as average passengers will run about fourteen to the ton, the rate amounted to twenty-eight cents per ton per mile, roughly speaking.

The average haul for each ton of freight was 141.8 miles, and the average receipts per ton were only \$1.0854. If freight could only be hauled at passenger rates, receipts for the average haul would have been \$39.48. If you will just bear in mind that, while laboring under odds of 39 to 1, the freight-train is earning three dollars to the passenger-train's one dollar, perhaps you may take off your hat to the next box car you see.

Possibly this method of arriving at the relative merits of the achievements of the freight and the passenger-train may not be scientific enough to be passed by a certified accountant, but it will serve as a means of making clear an important truth, and, as such, it will be indorsed enthusiastically by any operating officer.

When the limited is due, the freight-train has to get off the earth. The through freight has to take the passing track even for a dinky local passenger hauled by a fussy antique old enough to be the grandmother of the magnificent modern consolidation engine on the freight, and passenger-trains are becoming so numerous that to move freight at all is something of a fine art.

Letting Twenty-Five Trains Pass.

On the double-track Hudson River division of the New York Central, it has happened that freight-trains have had to lie at anchor on some sequestered siding, far from home and supper, for five hours at a stretch.

On this division there are 99 scheduled passenger-trains and express and milk-trains having passenger-train rights, between Croton and Albany, New York.

Imagine a hard-working, well-meaning freight conductor trying to dodge his way through such a maze! Picture, if you can, his heartrending appeals to the despatcher for "help" against some of the numerous limiteds and near-limiteds.

To be sure, there are no meeting-points on a double-track road, but there are passing-points enough to satisfy any craving. Through freights have been passed on the Hudson division by as many as twenty-five trains.

Yet the New York Central, in 1909, earned only \$27,377,491 from passenger traffic, while the freight earnings footed up \$50,796,116. Even this was a pretty high proportion for the passenger earnings when compared with other roads.

Chopping Up the Freights.

The New York, New Haven and Hartford is the only road in the country on which the receipts from passenger traffic exceed the freight earnings. On other roads passenger earnings make up but a small part of the total revenues—in some cases 13 per cent, and even less.

The passenger earnings of the Lackawanna, a high-class road running through a

thickly settled country, in 1909, were \$6,-630,053, as compared with freight earnings of \$24,832,536.

But to return to the Hudson River division. Under the condition outlined in the foregoing, the division has to handle an average of 1,500 cars a day, while the number not infrequently runs as high as 2,600.

To handle traffic at all, it is necessary to chop the freight-trains into small bites, an average west-bound train consisting of 55 cars, and the east-bound 45 cars. On the Mohawk division, the same class of engine that hauls 55 cars on the Hudson division would haul 90 cars, because the Mohawk division is four-tracked, and thus there is room for a locomotive to swing itself.

Fortunately, the passenger traffic on the Hudson River division is bunched in daylight hours, thus making it possible for the freight-trains to slip out under cover of darkness. Between 1 and 8.30 P.M. no freight-trains leave the terminals, the whole road being surrendered to passenger traffic. Only the luckless way-freights are out, and they have to do the best they can.

The Men at-Headquarters.

Railroading is a science in which many are called, but few are chosen for the big jobs at headquarters. It is enough to make an old-timer, brought up on a single-track road way out West, gasp to learn how the work of handling a busy division on an Eastern road is divided and subdivided and then cut up, and to see the swift gait at which everybody and everything travels.

The division superintendent alone has a staff big enough to have run the whole road in the "good old days." There is a chief clerk, and half a dozen other clerks; an assistant superintendent, with more clerks; a passenger trainmaster, with a chief clerk and more clerks; and a freight trainmaster, with a chief clerk and more clerks.

Of course, there is a chief despatcher and three trick despatchers. There might be more, if anybody could invent a way to employ more than one man to handle the trains on one division at one time.

Finally, there is that humble but highly important functionary, the car-service clerk, who distributes empties over the division for loading in such a way as to keep the kicks from shippers down to a minimum—if he can. No railroad ever furnished cars to suit all its patrons, and no railroad ever will.

In the evolution of the railroad, the train-order has been pretty nearly lost in the shuffle. Few train-orders are issued on a big double-track line now, for the block signal answers the purpose much better.

Side-Stepping Passenger-Trains.

When an inferior train should take a middle track or siding for a superior train, the engineer blows four blasts on the whistle while passing the block-station preceding the one at which switches are located. If given the clear main-track signal at such a block-station, the train may proceed, the engineer calling for switches at each successive block-station preceding the one where the siding or middle track is located until given switches and signals to turn out.

The proper clear signal given to a train at a block-station is all the authority needed to proceed on a main track ahead of trains about due or overdue, for it is given by and with the advice and consent of the despatcher, based on reports from the tower-men. This relieves the conductor of the necessity of spending half his time in stations importuning the despatcher for "help ag'in thirty-seven."

Freight-trains are classified into way-freight, pick-up-and-drop, slow through and fast through freights. At least, the officers and the more dignified clerks so designate them in general terms, mentioning the train numbers when they want to be specific; but, among the trainmen and in the yards, they are known as "The Lemon," "The Rawhide," "The Yellow Dog," "Holy Ghost," and similar endearing terms.

A Regulation Slow Freight.

By way of illustrating the journey of a way-freight, which serves the people who have to ship in less than car-load lots, the New York Central send one out from the Seventy-Second Street yards, New York City, at six o'clock in the morning, and it puts in the rest of the day getting to Croton, thirty-four miles away. The train-crew consists of a conductor and four trainmen—they ceased to be brakemen long ago. They never touch a brake, and have only a nebulous idea of what a hand-brake is. Very few trainmen even carry a switch-key. Tower-men or switch-tenders throw the switches, while the "pick-up-and-drop" trains set out and spot the empties and pick up the loads.

The "pick-up-and-drop" trains do all the

switching at the smaller stations, the more important stations having from one to four switch engines assigned to them. These trains run through between New York and Poughkeepsie, 72 miles, in 9 hours, if they have good luck. They are obliged to do their work at night to keep out of the way of the passenger-trains. Another run for this class of train is between Poughkeepsie and Albany.

Through freight-trains run the length of the division between New York and Albany, the slow trains hauling ore, coal, grain, and similar commodities, and making the run of 142 miles in about twelve hours, the fast trains covering the distance in seven or eight hours.

Some solid trains of high-class freight, such as dressed beef, make the run in five hours. Sometimes a fast train gets over the division without a stop, taking water from the track-pans.

Strenuous Work for Trainmen.

It is difficult for an outsider to realize the hardships of the trainmen on a fast through freight. There are only two of them to do all the work. The head man has to sit on the fireman's seat-box the entire distance, watching the fireman's desperate struggles to keep her hot until he is fatigued and bored beyond expression.

On all Eastern roads where interruptions by passenger traffic are most serious, freight traffic is very heavy, averaging 20,430 tons a year for every mile of track in New York, New Jersey, Pennsylvania, Delaware, and Maryland, as compared with 2,636 tons per mile per year in the southwestern States.

Still, high-class freight is hustled through pretty lively. To cite some examples of regularly scheduled fast freight-trains, No. MC 1 makes the run of 957 miles from New York to Chicago, via the New York Central and Michigan Central, in 56½ hours, an average speed of 17 miles an hour for the entire distance, including all stops. An average train consists of 40 cars.

The Baltimore and Ohio's fast freight covers the longer route, 1,100 miles, between the same points in 61 hours, an average speed of 18 miles per hour including all stops, with an average train of 23 cars.

Some Fast Freight Runs.

A regular fast freight from Boston, via the Boston and Albany, New York Central

and Lake Shore, makes the run of 1,036 miles in 60 hours.

The Illinois Central runs a fruit-train, averaging 60 cars, from New Orleans to Chicago, 912 miles, in 50 hours, including all stops.

The Katy runs a daily through freight from St. Louis to Galveston, 1,125 miles, in 84 hours, an average speed of 13.4 miles per hour for the entire distance, including stops.

The Southern Pacific has a scheduled through freight running from Galveston to San Francisco, 2,182 miles, in 187 hours, an average speed of 11.7 miles per hour, including stops, for this long distance.

The Wabash's No. 91, a through freight, runs from Buffalo to Omaha, 1,075 miles, in 80 hours, an average speed of 13.4 miles per hour.

The Northern Pacific nearly equals this gait in the run of 1,912 miles between Minneapolis and Seattle, making it in 145 hours.

The Chicago, Burlington and Quincy has a regular freight-train running through from St. Louis to Billings, Montana, 1,307 miles, in 86¼ hours, an average speed of 15 miles per hour.

The Frisco's banner train, No. 135, delivers freight from Kansas City in Birmingham, Alabama, 735 miles away, in 45½ hours, making an average speed of 16.2 miles an hour, including stops.

Striving for Records.

All this is mere daily routine which by no means measures the possibilities of handling freight expeditiously. For instance, the Erie, in July, 1909, believing the time for merchandise between New York and Buffalo was too slow, proceeded to shorten it. Thereupon the Lehigh Valley and New York Central took a hand in the time-reducing game by cutting the figure to 17 hours.

When the other roads had shown their cards, the Lackawanna, which has the shortest route, pressed express-cars into service in which freight was received at the New York piers up to 4.30 P.M. These cars were then whisked through to Buffalo in 13 hours, reaching the lake city before the teamsters had breakfast.

Dry-goods shipped from New York the preceding afternoon were put on the counters of department-stores in time for enterprising shoppers to get the benefit of early purchases. About this time somebody happened to remember that the money wasted on this foolishness could be applied to the payment of

dividends, so they shook hands all around and agreed to forgive and forget the Dry-goods Limited.

After all, when it comes to real long-distance shipments in fast time, the Canadian Pacific took the bun some time ago. On December 27, 1901, a consignment was shipped from Yokohama on a Canadian Pacific steamer. It was transferred to Canadian Pacific box cars at Vancouver, January 9, 1902, and was reshipped on a Canadian Pacific steamer at West St. John, January 17, arriving in Liverpool January 28, covering the total distance of 10,391 miles in 33 days, at an average speed of 13.12 miles an hour, including all stops and two transshipments.

Some Serious Freight Blockades.

As for volume of traffic, the Pittsburgh and Lake Erie, in April, 1902, moved 3,346 cars north in 24 hours in 75 trains, which was an average of a train every nineteen minutes. In November of the same year the Pennsylvania, goaded thereto by a blockade, for the first time in the history of the railroad, issued an order to the effect that until further notice passenger-trains were to have no rights over freight-trains, but were to make their schedules as best they could.

Under this rule, 6,700 cars were rushed out of Pittsburgh in two days. On November 19, 120 trains, aggregating 3,000 cars, were moved over the Pittsburgh division of the Panhandle. When all this had been done, 15 miles of freight-trains were waiting to get into Pittsburgh yards.

During a still worse blockade, in 1907, the Pennsylvania established the world's record for handling freight. In the week ending at midnight September 28, 41,332 cars passed Lewiston Junction, an average of 5,904 cars a day for the week. The following day, September 29, 8,360 freight-cars passed Lewiston Junction.

On June 22, 1909, on the Pennsylvania, engine No. 1113 hauled 105 steel cars, containing 5,544 tons of coal—gross weight of the train behind the engine, 7,644 tons—from Altoona to Harrisburg, 127 miles, in 7 hours 12 minutes, an average speed of 17.6 miles per hour. The Virginian Railway, one of the three roads in the United States having the heaviest traffic per mile of line, is a close second. In October, 1909, one engine hauled a train of 100 steel cars, containing 5,500 tons of coal—the gross weight behind the engine being 7,562 tons—125 miles, from Victoria to Sewall's Point,

in 8 hours 42 minutes; an average speed of 14.4 miles per hour, including three stops for water.

Minimizing Red Tape.

To handle the enormous freight traffic of a great railway system hindered by the exactions of the passenger traffic calls not only for clever executive work, but the cooperation of an alert and willing operating force.

The army of freight-handlers must finish their tasks on time, the agent's staff must be ready with seals and way-bills, and the yardcrews must get cars out of the way and make up trains the moment they are ready. The roundhouse force must have the power ready, and the train-crews must turn out promptly when called and devote their particular attention to getting over the road.

Much depends upon the yardmaster. Although no one but the superintendent and the paymaster are aware of his existence, the yardmaster works the miracles that save hopeless situations.

Various schemes have been evolved to simplify the task of moving high-class freight. One of these is the "red ball" system which has been adopted by a number of the big roads. The object of the "red ball" system is to run all-important freight through with a minimum amount of red tape.

The most conspicuous of the outward and visible signs of the "red ball" system is a destination-card about 7 x 9 inches tacked on both sides of the car. On this card a ball six inches in diameter is printed in bright red. Lettered in white upon it are the name of the station where loaded, the date, the number of the train in which it is to travel, and its destination.

Keeping the "Red Ball" Moving.

Red is the universal sign of danger on the railroad. In this case the "red ball" is a sure sign that any conductor who delays the car bearing it for any cause less than the loss of a pair of trucks is in danger of hearing something mighty unpleasant from the superintendent.

Other virtues of the "red ball" are that it facilitates the tracing of freight as well as its movement, and it relieves the auditor's office of a large amount of correspondence relating to movements and delays. The "red ball" is tacked only on cars containing perishable and other valuable freight. No "dead" freight, such as grain, cotton, coal,

or lumber, is allowed to travel in a "red ball" train, except when taken to fill out the tonnage. The "red ball" cars take precedence over all classes of freight except live-stock, and, in any case, must be kept rolling right along to their destination.

Each of the more important stations is designated by a letter or letters, and each has a series of numbers beginning at "1" and running up to a certain figure. These letters and numbers are used in numbering the cards and way-bills. Some roads use a "red ball" envelope to contain way-bills for "red ball" cars; others merely use a red way-bill. There are blanks on the back of the way-bill for recording the car's movement. Each conductor, when the car is turned over to him at the forwarding or division-point, must enter in the space provided the number of the train and train symbol, station taken from and left at, date, and signature.

Records and Reports.

The agent at the forwarding-point reports by wire to the superintendent of transportation all cars forwarded in "red ball" trains immediately after the train leaves, giving all symbol letters and numbers.

This is known as a "consist" report. If a car has to be set out for repairs, a report explaining the cause is made out on a slip of a certain color and pasted on the "red ball" envelope or way-bill.

The report is wired to the superintendent of transportation. As the train proceeds, it is reported by wire from certain stations on a "passing report," which gives all the symbols for each car in the train. Arrival at destination is similarly reported. The car-service agent of the Chicago and Northwestern has a huge chart on the walls of his office on which a graphic record of the movement of "red ball" freight is displayed.

Running horizontally the length of the chart is a list of stations. Above and below are three rows of hooks on which boards seven inches square may be hung. These boards are full of holes, in which pegs are placed labeled with the code letters and the numbers assigned to the stations at which the cars in a train originated. Each board represents a train, and each peg a car.

As the train proceeds and is reported, the board is moved along the chart until its destination is reached. Thus the car-service agent can see at one comprehensive glance the position of all the "red ball" freight in transit on his road.



SIMPSON'S SCENIC ENTERPRISE.

BY R. K. CULVER.

"Art Is Long and Time Is Fleeting, and the Jail Is Not Our Goal."



HE limited was at a standstill.

We were waiting for the wrecker to clear away the remains of a freight piled along the track somewhere up the line.

That is how we happened to meet Skip Simpson.

It seems he had been roosting underneath the freight. The accident had knocked him from his perch, and Providence had sent him down the track to us uninjured.

We needed Skip Simpson. Inflammatory peevishness was setting in when he arrived. It disappeared as soon as he began to talk. A man of benign appearance, named Stilwell, invited him into the smoker and handed him a cigar.

"Unfold to us," said Stilwell, "the story of your life. Let us glean the knowledge you have reaped. Tell us what you held and what was in the draw."

"Sure," said the fast-reviving derelict; "sure I will. Life strikes me as a funny proposition. It is sad in spots, but I can't

say this is one of them. Sometimes the cards go bad, and then again you fill. Here I am, jolted off a brake-beam, expectin' to wake up where a good story don't get you anything—but—here I am, shook loose from a dusty night freight-and-travel, wherein the luxuries of life are not what you would call numerous, and I'm set down soft and easy in the midst of peace and plenty.

"You may have noticed that when I stepped in here I reached into my pocket and made a motion toward that button in the wall. That wasn't any bluff; it was force of habit. I used to travel this way, friends.

"I might as well acknowledge at the outset that I was born with brains. Early in the game I grabbed my wad out of the general fund for frisky thinkers. I took to seeing North America and principal way-stations.

"Life was a movin' panorama, with Skip Simpson directin' whither it should move, how fast, and whence. I was the boss intelligent observer. When things didn't look

good to me I just closed my eyes and let 'em glide on by. But it seems I had a round-trip ticket on the route that I had taken. It wasn't long before I was back where I had started from—dead broke.

"While there wasn't any coin in my pockets, in my educated ears there was the sound of it, mixed with the jolt of trains and the rumble of the rails. I took to ridin' freights, where the jolt and rumble part was real enough, but the coin was imaginary.

"Ridin' freights gets on your nerves in time. One day I was hangin' to the bottom of a stray from some place where they build 'em low, and my horizon line was limited. 'This is no way for me to tour the continent,' I says. 'There's nothin' to it but a backache and cinders in your eye.'

"I began to think of all those trips that I had taken on the velvet. I remembered how I used to pay three dollars for a meal, and how I used to lean back and knock the ashes off a fat cigar with the tip of my little finger. I recalled the scenery, too.

"I recollected that the sights along the way were featured by one road in particular. It hired a loud-voiced party in a uniform to point out things to you. Strange things they were—rocks that looked like Indians, or animals, or buildings. It was natural scenery that didn't look that way. When the road's surveyors ran across a rock or cliff that looked like Chief Rain-in-the-Face, or

George Washington, or an Indian squaw, they put 'em on the map, and later the tracks went in that direction. From the way folks rubbered at those freak effects in nature, I figured that scenery of that sort must get travel for a road. It made me think.

"'What's the matter,' I says to myself, 'with a wise man like yourself manufacturin' similar attractive sights along some railroad line? Why can't Skip Simpson get next to some passenger-traffic manager and spring a proposition to create, along the way of travel, attractive geological formations that will look like anything from the Venus de Milo to the Sphinx of Egypt at, say, five thousand dollars per?' I knew those things were classic and would take. They would make money for a road.

"When I got that idea I near fell off the freight that I was clingin' to, but I managed to hang on till I got to where the big talk could be made.

"When you wear a celluloid collar that has never seen a sponge and a fried-egg hat and a suit of clothes that's faded green, that is the time when gettin' next to the influential party that you wish to hypnotize makes breakin' into a bank vault at high noon on a busy day seem like an easy and a pleasant pastime.

"That passenger-traffic manager I was after inhabited the fifth floor, which was also infested by the president and all the



"YOU DON'T LOOK LIKE A MICHAELANGELO TO ME."

other big ones. There were guardians at every door that led in toward the main works. Each time they put me out I took another look up at the fifth floor and walked around the block and came back for another try. But it wasn't any use. I guess it was the green clothes and the celluloid.

"I began to know that it was up to me to take a chance. My eye kept travelin' up the fire-escape toward a piece of plate-glass, where I saw 'Passenger Traffic Manager' printed large and plain. I had gambled some before in my time, but this way of gettin' next was a game I'd never tried.

"I couldn't notice anything to stop me, so I started up. That was one time in my life when I was lucky. The window wasn't fastened, and the manager was out. But on his desk there was a half-smoked, smolderin' cigar. Knowing he'd come back soon, I stepped out into the waiting-room.

"I want to tell you, friends, that when I heard him comin' up the hall my old desire to travel got me strong. After climbin' a five-story fire-escape and enterin' a private office by the window route, a man has got to think some fast to make good.

"By the time he had showed up I had changed my plans three times. The third change bein' naturally the quickest, I had to hurry some in puttin' back the feather-duster I had grabbed to impersonate the janitor.

"'Honesty,' I says, 'is rare enough to go once in a while. Let's see how she'll work this time.'

"When he arrived he sized me up, celluloid and all.

"'How did you get in?' says he.

"I told him how I had got tired of bein' kicked down-stairs all day, and how I had broke in with a ripe idea worth big money to his road and ready to be picked.

"'I know what I ought to do,' says he, 'but I'll wait a minute. What is your proposition? It must be a wonder. You're taking big chances; burglary will be the charge unless you come through with the O. K. stuff. Talk fast.'

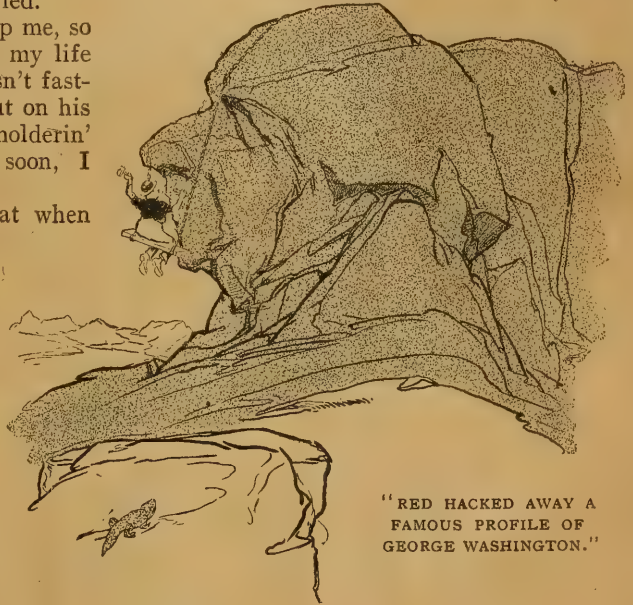
"The way I spread out that scenic scheme of mine for him was pleasing to the eye. It made him behold grand bits of magnificent, manufactured natural scenery that looked like statuary and similar art relics 'eroded by the simple and continuous action of the elements,' as the guide-books say.

Friends, there was class to what I said to him. I surprised myself.

"'You don't look like a Michelangelo to me,' he says.

"'I will look like a near relative of his as soon as I get busy,' I replies. 'The Venus,' I went on, 'would come a little higher than the others. I might have to study up her curves some, and maybe it would take a little extra practise to carve her out to suit your Boston travel.

"'But the Sphinx, now—say, just the bust



"RED HACKED AWAY A FAMOUS PROFILE OF GEORGE WASHINGTON."

and head—she would be dead easy. She's naturally an outdoor proposition, kind of rough-featured and rocky-looking, which is what you're after.

"'What do you say to five thousand dollars for an imitation of the Sphinx, gazin' about nine thousand miles into space, like she has forgotten Faro and the rest of the old card-sharps? Five thousand dollars, with an option of six months at six per cent? You'll know by that time how she hits the public. If a photograph of her fails to liven up your scenic catalogues and increase your first-class travel, I don't want a-cent. Are you on?'

"After studyin' a while, he says: 'That sounds fair. I don't see how the company can lose. Go ahead, get up your scenic Sphinx. We'll see how she takes.

"Let me tell you that was a large order to come by the way of a five-story fire-escape, and to a man who knew about as much about sculpture as a coyote knows about music.

I walked the streets a week, wonderin' what the answer was. Finally it came to me, and its name was Reddy Foster. Red was a tombstone cutter I had met once. I located Red, and told him what I wanted. I promised him one thousand dollars for the job. He was taken with the idea. He said he was tired of working for dead ones.

"The proposition looks alive to me," says he. 'It's high art, that's what it is; high art, *pro bono publico*. Me for it,' he says.

"Red came through with coin enough to land us on the ground, which was as wild a country as a buzzard ever sailed across. Everywhere you looked there were gorges, chasms, ravines, mountain peaks, waterfalls, cliffs, and rocks that stuck up all around like crumbled pyramids.

"We picked a clear half-mile stretch along the road, from which you could get a good view of a big rock away to the west, against the sky.

"That's pretty close," I says. 'You'll have to do a nifty piece of work at that range. Those tourists carry glasses, but you know your business better than I do. Remember, there's a cold thousand in it for you—fifty big gold pieces—if you carve a Sphinx that will look as if nature was on the job about ten thousand years ago. That's the sort of scenic wonder that I want—something old, you understand, and classy.'

"Fifty twenties!" murmurs Red. 'Why, I would be carvin' snow-white doves and rest-in-peace designs and angels for six months before I ever would see that much. Fifty yellow boys! Let me at this piece of ancient art before you change your mind. I can almost see it loomin' up there now. It won't take me long—about two days. By to-morrow morning you'll owe me twenty-five of those yellow pieces.'

"Red seemed to have the money-fever strong. 'Forget the coin,' I says, 'and go in for high art, *pro bono publico*, or whatever you said it was.'

"All art," says Red, 'has its incentive. Your real artist has to have an inspiration. Don't worry. I've got mine. This little job is going to please the public. It's not for dead ones I am doing this.'

"That's the way to talk," I says. 'You get the right idea. The old Sphinx, loomin' large against the sky among those natural obelisks and time-worn pyramids, ought to please the tourist eye, even if the rest of the landscape ain't exactly on the straight Egyptian level. You can begin to hack the old girl out any time the fancy strikes you now.'

"While Red was chiselin' out that bit of natural oriental scenery, I kept camp. He worked till dark. He said it was a tougher job than he had figured on.

"It'll take a week," he says. 'Swingin' in the air, carvin' a fifteen-foot profile onto that granite range is different from sittin' on a soap-box, chippin' off the marble from around a dove of peace.'

"It was a tough job, all right enough. I felt sorry for Red; but along about the fifth day I could see that he was getting things in shape. Our provisions were running low. There was only just about enough grub left to last Red till he got through, so that night I told him to go ahead and finish up the old girl and to meet me later in civilization at the foot of the grade. I caught a freight and landed in the little burg below, and began to kill time waitin' for Red to show up with his finished art report. It was a lonesome spot where that railroad hit the slope.

"One evening I was sittin' on a baggage truck, when a train from up the grade blew in. Red crawled out from underneath.

"She's done," says he, 'and a finer piece of natural scenery don't exist nowhere.'

"Just then, from the open window of a private car, I heard a voice I seemed to know. Sure enough, it belongs to my old friend, Mr. Passenger Traffic Manager.

"Listen, Red," I says. 'That's the same identical party we've been workin' for; but, from the sound of him, pay-day is a long way up the line for us.'

"I don't just recollect the exact words that came floatin' out of that car-window; but I got the sentiment which they expressed, all right. It seems our scenic wonder had got in bad. She was not winning any prizes in the natural beauty contest so that you could notice it. It turns out that, in the making of her, Red has hacked away and destroyed a famous rock profile of George Washington, the one choicest wonder of the scenic way!

"We also gathered from the language which kept comin' from that window that there wasn't any limit to the punishment for such a 'criminal act of vandalism'—that's the name he gave it—as we had 'wantonly committed'—that's the way he put it.

"Simp," says Red, in a husky whisper, 'let him talk his head off. I did a good job, all the same. She just kind of grew out of that rock for me. I sure was inspired.'

"Red," I says, 'don't make me laugh. Forget it. Art is long and time is fleeting, and the jail is not our goal; but it will be if we hang around this place much longer.'

"How true that is," says Red; and the last I saw of him he was divin' for a good hold on a fast freight going north.

"Friends, that was the last time I was ever close to money—if you could call that close. It may not seem a sad event to you, my failin' to clean up four thousand dollars clear on that scheme of mine, but it depresses me sometimes. What do you know about that, anyway?"

for popularity beats anything on record. That Sphinx you tried to make is the finest imitation of the classic profile of the lady on a twenty-dollar gold-piece that ever happened. It lures more travel than all our other sights combined. In our scenic circulars we have a picture of her against the golden disk of sunset—the illusion is a wonder. Why, folks have cut that picture out and tried to buy things with it! Come with



"HE SAID HE WAS TIRED OF
WORKING FOR DEAD
ONES."

There was a painful silence in the smoker. It was broken by one Stilwell, the benign-appearing gentleman.

"I know," said he, "that I've been on your trail for the last five years—ever since you did that little job you mention. I usually come in on the finish of a story like yours. Most of the men I go after give themselves away in the smoker where your sort get confidential.

"Being a detective for the road whose property you fooled with, I have a little duty to perform. About a month after you did that piece of work, our road discovered that from a certain half-mile stretch there was visible a scenic wonder, the like of which

me and gather that five thousand dollars with accumulated interest; also, an annual pass. You are it with this road."

Skip Simpson scratched his head, but not because it itched. He was meditating.

"Wouldn't that get you, friends?" he said. "Why, for five long, hungry years I've been wanderin' up and down the ties, nursin' the superstitious notion that carvin' hereafter mottoes onto tombstones had got Red into a kind of rut and queered that scheme of mine. But, now that you remind me, I do seem to recall that the image on those fifty twenties that I promised him did appear to be mighty strong on Red's mind when he chiseled out that Sphinx. He said he was inspired."



BOSS OF THE WRECKING CREW.

BY J. EDWARD HUNGERFORD.

Written for "The Railroad Man's Magazine."



HE fireman and brakeman and engineer
Are valiant fellows and true;
Oh, they're always on tap when it comes to a scrap—
And so is the rest of the crew;
But when there is trouble along the line,
Demanding quick action and brain,
You will usually find that the fellow behind
Is the Boss of the Wrecking-Train.

Oh, the Boss of the Wrecking-Train!
With tackle and block and crane;
When old trouble's around he's the man on the ground,
A, plugging with might and main.

He is always expecting disaster,
And he's ready to face it, too;
Be the trouble a switch or a train in the ditch,
He knows the exact thing to do.
No doubt he's some rough in his ways of speech,
And says what he thinks pretty plain;
But the calling he serves draws some hard on the nerves,
Though he's seldom heard to complain.

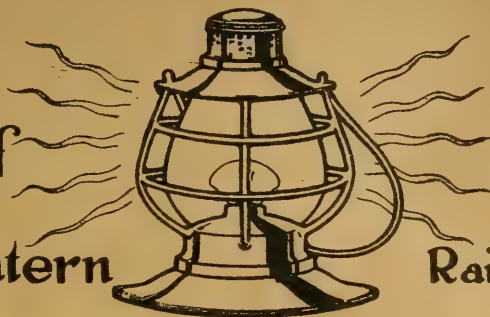
Oh, the Boss of the Wrecking-Crew!
He's trusty and tried and true;
With his derrick and crane, his replacer and chain,
He shows us a trick or two.

His path of life is littered with wreckage;
His passport is "W-K,"
When he goes for a ride traffic steps to one side
And gives him the whole right-of-way;
His stock in trade's nerve and good judgment,
Much hustle, big muscle, clear brain—
He's a stranger to fear and he keeps the track clear,
Does the Boss of the Wrecking-Train.

Mr. Boss of the Wrecking-Crew,
We're proud of the "stunts" you do;
You're as good as the best, and you've proved it by test,
And we take off our hats to you.

WHAT'S THE ANSWER ?

By the
Light of
the Lantern



Questions
Answered
for
Railroad Men

ASK US !

W E like to be as useful to our readers as we can; but, because of the great popularity of this department, we are forced to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature only. Letters concerning positions **WILL NOT** be answered in this department. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials.

W HAT is the name of the C. R. and I. R. R., which enters Chicago?

(2) Does this road do any passenger business?

(3) How many engines and cars has the Jamestown, Chautauqua, and Lake Erie Railway, of Western New York?—T. P., Chicago.

(1) Chicago River and Indiana Railroad.

(2) No, it has 3 locomotives and 30 freight-cars.

(3) The mileage is 42, with 5 locomotives and 13 cars, of which latter 6 are passenger and 7 miscellaneous cars.



G. W. P., Newcastle, Pennsylvania.—We can find no record of a journal devoted exclusively to the news of car works, but several technical papers in this country feature car construction. Prominent among these might be mentioned the *Railroad Age-Gazette*; the *American Engineer and Railroad Journal*, and *Railway and Locomotive Engineering*, and *THE RAILROAD MAN'S MAGAZINE*. The address of all is New York City, New York.



H OW slow must a train run through an incorporated town?

(2) How slow must a train be going when passing a "slow" signal for a railroad crossing?

(3) If a mixed train approaches a railroad crossing, whistles to cross, and at the same time a passenger-train on the other line whistles to cross, which has the clear track?

(4) Give a short history of the "Cairo and Poplar Bluff Branch."—Mr. E. H., Dudley, Missouri.

(1) It depends entirely on the speed restrictions of the town in question, and, of course, on the proportion of grade crossings to the distance which must be traversed within the corporation limits. Some towns are liberal to the railroads in this regard, allowing quite a respectable speed, provided that safety-gates, etc., have been installed. Fifteen miles an hour is commonly regarded as fair to both parties, but it is nevertheless recalled that many six-mile-an-hour crossings still remain in the United States. On the other hand, should the railroad be elevated through the town, examples of which may be found on the Pennsylvania through Newark, New Jersey; Chester, Pennsylvania, or Wilmington, Delaware, there is nothing to prevent a train from proceeding at whatever speed is desired.

(2) In reality there is no such thing as a "slow" signal where two railroads cross, and the speed at which various crossings are to be negotiated is usually covered in special instructions which are to be found on one of the pages of the employees' time-table. In many States, there is an imperative rule that all trains must come to a full stop before crossing, no matter what system of signals may be employed, or even if the way is known to be clear to the engineer. This is merely in the interest of an additional precaution. Some

authorities considered it needless because the elaborate system of interlocking in-vogue at practically all crossings renders it impossible for the operator to allow both trains to approach at the same time. The "derail" is open for the train on which the signals are against.

(3) In the event of such a situation the superior train is given preference. Should the latter be due even within a reasonable time the operator would likely hold the "mixed" and clear its line.

(4) We believe that this road was commonly called the "C. A. T." branch of the St. Louis, Iron Mountain, and Southern, but we are hazy even in this assertion. There was formerly a Cairo, Arkansas, and Texas, and also a Cairo and Fulton, and the road which you mention may have been either or both. In order to get it straight, and in the quickest time, we suggest that you correspond direct with some official of the Iron Mountain in your immediate territory.



E. F. L., Needles, California.—In regard to the railroads of Brazil, Argentine, and Peru, and for general information concerning them, the various American consuls in those countries should invariably be addressed. These gentlemen are expected by the government to answer any reasonable query, and that they understand this is evinced through the return of reports submitted at irregular intervals in which they define existing conditions. Such consular reports are largely intended to anticipate requests for information, and they may be obtained by addressing the Secretary of State, Washington, District of Columbia. From your brief letter we do not know what your idea is in looking up information about the railroads of those countries, but if it is with any idea of going to work there—*don't do it*.

From its beginning, this magazine has discouraged all aspirants for railroad honors in the tropics. Some of the roads therein are bad, others are worse, and, speaking always from the standpoint of an American engineer, fireman, or conductor, none of them offers any real appeal to a man. This does not mean that the roads thus criticized are lacking in the essentials of good railroading. On the contrary, they are everything which might be desired in perfection of equipment and thoroughness of administration, but they don't suit the ideas of the American workman. The quicker they are forgotten the better.



WHAT size of stack should an engine have with cylinders 17 x 24 inches, and how do you compute it?

- (2) What is termed by the lap of a valve?
- (3) What is termed by the lead of a valve?
- (4) How do you find the heating surface of a flue?
- (5) How do you find the heating surface of a set of grates?
- (6) How do you find the area of a steam-port?
- (7) How do you find the pressure on a safety-valve?
- (8) How do you find the area of an exhaust-port?

(9) How do you find the pressure on a stay-bolt?

(10) How do you find the pressure on a piston?

(11) Which end of the piston has the most pressure, and why?—W. J., Waterloo, Iowa.

(1) For this size, the stack should have about the same inside diameter as the cylinders, or possibly an inch or two smaller. There is no hard-and-fast rule for determining the size of stacks, notwithstanding that the subject has been before the mechanical world for many years. Theoretically, the exhaust nozzle, if single, is supposed to be one-quarter of the cylinder diameter, but unless unusually favorable conditions are present, engines will not steam satisfactorily following this rule. To illustrate: this would mean a five-inch nozzle for an engine with twenty-inch cylinders. With the rather indifferent coal in general use for locomotives, the desired results would scarcely be attained with a nozzle larger than four and a half inches. The relation of the stack in size to this nozzle would be about four times the latter's diameter, or eighteen inches. It should also be borne in mind that the diameter of any stack designed for the best results is affected by the height of the exhaust nozzle. As the nozzle is raised the diameter of the stack must be reduced, and as the nozzle is lowered the diameter of the stack must be increased.

(2) The lap of a valve is that portion which overlaps the steam-ports when it stands midway over the valve face. This is termed "outside lap," and, ordinarily, in speaking of the lap of a valve, it means outside lap. Inside lap, when present, is the amount which the valve overlaps the inside edges of the steam-ports when the valve is in its middle position.

(3) Lead means the width of the opening of the steam-port when the piston is at the beginning of its stroke.

(4) Multiply the outside diameter by 3.1416, and this result by the length of the flue in inches, and divide by 144, which will give total heating surface in square feet. For example, in case of two-inch flue, twenty feet long:

$$\frac{2 \times 3.1416 \times 240}{144} = 10.472 \text{ sq. ft.}$$

144

(5) In common practise about 50 to 75 square feet of heating surface are given for each square foot of grate. There are, however, no reasons for the proportions of either grate or heating surface which are given, excepting that it has been found that they yield good results in ordinary working. The proportion of grate to heating surface is governed to a very large extent by the kind of fuel used. Anthracite coal and the poorer qualities of fuel require larger grates than good bituminous coal or wood. It is, however, quite certain that the larger a boiler is, and the greater its heating surface in proportion to the steam it must generate, other things being equal, the more economical will it be in its consumption of fuel. In other words, the more water it will evaporate per pound of coal.

(6 and 8) As these ports are generally of

rectangular shape, simply multiply the length in inches by the breadth in inches.

(7) The pressure is determined by multiplying the area of the opening for the valve in square inches by the greatest steam pressure in pounds, per square inch, which the boiler is intended to bear. Thus, if the opening for a safety-valve is three inches in diameter, its area will be seven square inches, and, therefore, if the greatest steam pressure which it is intended that the boiler shall bear is 150 pounds per square inch, the valve must be pressed down with a pressure equivalent to $7 \times 150 = 1,050$ pounds.

(9) Multiply its diameter in inches by 3.1416, and this by its length in inches. This result multiplied by the boiler pressure in pounds per square inch will give the total pressure on the stay-bolt.

(10) It is generally assumed that the initial steam pressure on the piston is 85 per cent of boiler pressure. Consequently, to obtain the total pressure on the piston at the beginning of the stroke multiply the diameter of the cylinder by itself and the result by .7854. This will give the area in square inches, and when multiplied in turn by 85 per cent of boiler pressure in pounds gives the total pressure.

(11) There is a slightly less total pressure on the end of the piston to which the piston-rod is attached, as the diameter of the latter is an area which must be reckoned with in a close calculation.

A. S., South Bethlehem, Pennsylvania.—In regard to positions in the New York Subway in connection with the signal service, we would suggest that you address A. L. Merritt, superintendent Subway Division, Interborough Rapid Transit Company, Ninety-Sixth Street and Broadway, New York City, New York.

F. C., Fort Monroe, Virginia.—The idea of oil-burning locomotives is shrouded in antiquity. As far remote as 1850, it was suggested on the Baltimore and Ohio Railroad, but the Baltimore and Ohio never had any oil-burners, and can only lay claim to the first thought. Even the development of the oil-burner is hard to follow, but it certainly lies between the Southern Pacific and the Atchison, Topeka, and Santa Fe. Although lacking in accurate statistical data at this writing, we are inclined to believe that the first-mentioned road was the pioneer.

(2) The Southern Pacific has employed this class of engine for, say, between fifteen and twenty years.

(3) The New York Central and Hudson River Railroad holds the authenticated record for the fastest mile. It was made by the Empire State Express. This was by the justly renowned engine, the 999, which on May 9, 1893, covered five consecutive miles at the rate of 102.8 miles an hour. One mile on this stretch was traversed in 32 seconds, or at the rate of 112.5 miles an hour. There are other records claiming to exceed the above phe-

nomenal speed, but they lack the elements to render them entirely credible.

L. H. W., Galveston, Texas.—We have no record of any race between the two roads which you mention to secure a mail contract, and think that you must be misinformed. You will note that each road carries the mails and have always done so, according to the information which we have secured.

W. HAT is the total mileage of the entire Santa Fe Railroad system?

(2) At what points does the Santa Fe have apprentice schools for machinists?

(3) If an applicant can pass the required examination can he start immediately to serve his time, or will he have to work as a helper on his entrance to the service?

(4) At what points does the Union Pacific have apprentice schools?

(5) Has the Southern Railway two round-houses and shops at Knoxville, Tennessee?

(6) Where is the largest shop of the Southern Railway?—A. H. S., New York City.

(1) Santa Fe proper, 5,573 miles; coast lines, 1,974 miles; Gulf, Colorado, and Santa Fe, 1,518 miles; Leavenworth and Topeka, 47 miles. Total, 9,112 miles.

(2) All along the line, notably at Newton, Kansas, and Albuquerque, New Mexico.

(3) Immediately.

(4) We haven't the full list, but the principal one is at Omaha.

(5) One roundhouse. It is situated in the suburb of Lonsdale, about two miles from the depot in Knoxville, going west.

(6) Knoxville, Tennessee, or Lonsdale, as mentioned above.

In regard to your questions 7 and 8, we have no means of determining just what differences exist in the amount of traffic handled by the roads mentioned in the same territory. To hazard a vague guess, however, we would say that it should be about an even-up proposition between those you mention.

O. W. T., Geneseo, Kansas.—The consolidation, or 2-8-0 type, is generally employed on the Rock Island between the points named. These engines weigh about 100 tons. Between Newton and Dodge City, Kansas, the Santa Fe uses one of similar type, weighing between 100 and 115 tons.

G. E. T., Kalamazoo, Michigan.—About the only way we can suggest for you to become a marine engineer is to enter as a cadet in the merchant service, or, failing in this, as an oiler, which always affords opportunity for advancement. In the consideration of this matter, however, it might be well to reflect that the carrying trade of the world is practically under foreign flags, with the English predominating in the ratio of

about three to one. This means that the wage scale is much lower than under the American flag, and that the service is amply recruited by persons of that nationality. Of course, there are many ships flying the American flag, but they are limited when compared with the others. The pay under the American scale is quite liberal—almost twice that of the others. Full information concerning pay can be secured by addressing the owners, or, possibly, the agents of the line under consideration.

J. E. K., Lawrence, Massachusetts.—The Laramie, Hahn's Peak, and Pacific Railroad is 55 miles long, 4 feet 8½-inch gage, with 2 locomotives and 18 cars. We have absolutely no data relative to the prosperity of this company.

WHERE are the division points of the Santa Fe in Colorado, New Mexico, and Arizona?

(2) What type of locomotive is used in that territory?

(3) What is the average pay for a fireman, per hundred miles?—J. C., Mendota, Illinois.

(1) La Junta and Trinidad, in Colorado; Las Vegas, Albuquerque, and Gallup, in New Mexico, and Winslow and Seligman, in Arizona. All of the above, of course, are mentioned in connection with the direct main line.

(2) In passenger service, the prevailing type has been the Pacific (4-6-2), and for freight, the decapod (2-10-0) tandem, compound locomotive. These latter engines have cylinders 19 inches and 32 x 32 inches; working steam pressure 225 pounds per square inch, and total weight 267,800 pounds. The Santa Fe also uses in that territory in freight service the "ten-coupled and trailing truck" (2-10-2), total weight, 287,240 pounds. This class was also on the tandem compound plan, but, we understand, many of them have been changed to simple engines. In addition to the above prominent examples, they have many engines of the consolidation (2-8-0) type in service on the main as well as the side lines.

(3) It varies considerably between different sections of the country, to such an extent, in fact, that it would be difficult to quote a general average. This might approximate \$2.50 in the East, and \$3, or more, in the West, per hundred miles, but it is only an estimate and is not intended to be assertive.

C. N. F., Hugo, Oklahoma.—(1, 2 and 4) Flagstaff, Arizona, is on the main line of the Atchison, Topeka, and Santa Fe Railroad, and it is also the headquarters of the Central Arizona Railway. The elevation of the town is 6,885 feet. With the exception of small terminal facilities, no railroad-shops are located there. On the Santa Fe, the engines run from Winslow, Arizona, to Seligman, Arizona, and from Seligman to Needles, California; hence Flagstaff is not a division point. The next large shop going east is at Albuquerque,

New Mexico, 344 miles, and going west, at Needles, 234 miles. San Bernardino, California, 484 miles west of Flagstaff, has very extensive shops belonging to the Santa Fe. The Central Arizona Railway has 5 locomotives and 100 freight-cars, operating on 24 miles of standard-gage road.

(3) The compensation for labor of all classes is much higher in the Far West than in the East. The writer recalls a rate of 42½ cents per hour for machinists and boilermakers in 1907, on the Santa Fe, west of Albuquerque, and this has no doubt since been increased at some points. Some so-called "handy men" received as much as 35 cents per hour, and good helpers were equally well paid. You must understand, however, that the points mentioned above, with the exception of San Bernardino, are in the heart of the desert country, and are not particularly attractive from a residential standpoint.

H. E. R., Waterbury, Connecticut.—The system of supplying a locomotive with water while in motion from track-tanks was first introduced into this country by the Pennsylvania Railroad. You are correct in the name of the road which you mention between Altoona and Harrisburg, Pennsylvania.

WHO publishes the code of rules of the Master Car Builders' Association?—W. R., Oakland, California.

They are published by the association. Address J. W. Taylor, secretary, Old Colony Building, Chicago, Illinois.

WHAT is a Forney locomotive? In this type as well as in a double-ender, what does the third figure of the classification represent?

(2) Has the New York, New Haven, and Hartford any freight-engines larger than a 2-6-0?

(3) What is the tonnage of the 4-4-2 and 4-6-0 type of engines on the Boston and Maine Railroad?—H. G. L., Orange, Massachusetts.

(1) This type of locomotive was first suggested by M. N. Forney, author of the "Catechism of the Locomotive." It has four or six driving-wheels, and a four or six-wheel swiveling rear truck, but no front truck. A small water-tank and coal-bunker are carried over the rear truck; hence the classification, according to Whyte's system, is 0-6-4 or 0-6-6, the third figure indicating the number of wheels composing the rear truck. The same explanation applies to the "double-ender" type, which is 2-4-4 or 2-4-6. In this connection, you will note that the double-ender has a leading truck; thus, the figure 2 is substituted for the 0 in the Forney type.

(2) They did have a few consolidations (2-8-0) heavier than their present standard freight-engine of the mogul type (2-6-0), but we are not certain if these are still in service. Those to which reference is made were known as class "P," and were

in service on what was known as the "shore line" division some few years ago.

(3) About 100 tons.

In regard to your query about the race, which we have omitted in the above enumeration of questions, we are inclined to view all such reports with extreme skepticism. The way schedules are screwed down now, you have practically to race all the time to hold your own. Our belief is that the man was thinking much more about making his own time than of that being made by the other fellow.

J. E., San Francisco.—Would suggest that you take up the matter of books desired with the *Railroad Age-Gazette*, New York or Chicago. That journal would be pleased, no doubt, to advise you in regard to the railroad pools, a matter concerning which we are entirely without information.

J. S., Waterbury, Connecticut.—We can find no record of an electric railway under construction in the territory mentioned, but if any such is in prospect the secretary of the Board of Trade, St. Paul, Minnesota, can definitely advise you.

WHAT is the relation of the curve of the track to its length? To state it clearly: in what length are degrees of curve to be contained? I understood it to be contained in one standard rail length, 30 feet. By this figure, the circle will be, if it is a one-degree curve, 360 times 30 feet, or 10,800 feet, and if it is a two-degree curve, 5,400 feet. Its diameter, by formula, will be 10,800 divided by 3.1416 equals 3,437, and for the other, 5,400 divided by 3.1416 equals 1,718.8. These figures vary somewhat from your answer to question in the July Lantern regarding curves.—**B. M., Butte, Montana.**

In our reply to "H. E." in the July number, which you mention, we were fully aware that the answer about the curve was not absolutely correct, but we did not think that the gentleman referred to wanted micrometer measurements of a railroad curve. In the United States, it is customary to express curvature in degrees noted by the deflection from the tangent measured at stations 100 feet apart. In other words, the number of degrees of central angle subtended by a chord of 100 feet, represents the "degree curve." One degree of curvature is equal to a radius of 5,730 feet. Therefore, the number of degrees divided into 5,730 gives the radius in feet, or, *per contra*, the number of feet radius divided into 5,730 gives the number of degrees. This assumes that the 100 feet are measured on the arc instead of the chord, but the error is so slight on curves commonly used that it may be ignored for ordinary calculation. We gave "H. E." a one-degree curve as 5,730 radius, on a 100-foot chord, and a two-degree curve as 2865 radius, or one-half: Now, a one-degree curve being 5730 radius, a ten-degree curve is 573.7 radius, a twenty-degree curve is 287.9 radius, a forty-degree curve is 146.2 radius.

In English practise, it is common to define a curve as so many chains (66 feet) radius. Thus, the radius of a one-degree curved expressed in chains would be 5,730 divided by 66 equals 86.81. Therefore, 86.81 divided by the degrees equals the radius in chain, or 86.81 divided by the radius in chains equals the degrees.

WHAT do the railroads pay for coal used in locomotives?—**U. H., Baltimore, Maryland.**

The cost of coal per gross ton on American railroads ranges from a minimum of \$1 to \$1.50 on roads obtaining coal at mines on their own lines, to a maximum of from \$4 to \$5 at the least favored points east of the Missouri. In some cases it is as high as \$6 or more at points further west.

HOW much can a locomotive pull on a level road and 1-2-3-4-5-6-7-8-9-10 per cent grade? This locomotive mentioned above can pull 4 cars on a 790 grade, the 4 cars weighing 100 tons.

(2) How many empty cars can a locomotive pull around a 22-degree curve on a level track without pulling the middle cars off the track?—**R. E., Hamilton, Washington.**

The editor is somewhat nonplused to grasp what is meant by the 790 grade. It is easy enough to determine how much a certain engine with a certain tractive power will pull on different grades, but before we can arrive at any conclusion, it is necessary to be supplied with additional elements which are lacking in your query—above quoted.

For example: given a locomotive with a total weight of 120,000 pounds, with 94,000 pounds on the driving-wheels—driving-wheels, 56-inch diameter; cylinders, 18 x 24 inches; working steam pressure, 180 pounds; tender, 3,500 gallons capacity; weight, 72,000 pounds—derive the number of tons hauled on a straight grade of one per cent with 9-40 adhesion. This question is now in proper form for solution. In the first place, we find that an 18 x 24-inch cylinder locomotive with 56-inch driving-wheels will develop a tractive power of 21,200 pounds. Now, 94,000 pounds on driving-wheels, divided by 9-40 adhesions, equals 21,250 pounds, and, therefore, this latter being equal to the tractive power, viz.: 21,200 pounds, the cylinders and weights are properly proportioned. Having established these facts, we find through a somewhat elaborate calculation that with 9-40 adhesion and 7 pounds resistance, 8 tons will be hauled for each 1,000 pounds on the driving-wheels on a straight grade of one per cent. Therefore, for 94,000 pounds weight, a load of 94 x 8 tons will be hauled, which equals 752 tons. From this amount must be deducted the weight of the engine and tender—192,000 pounds, or 96 tons. This will leave 752-96, equal to 656 tons of cars and lading which the engine will haul on the given grade.

We are giving this illustrative case simply to impress on many correspondents who neglect it

the necessity for furnishing complete data when their problems are submitted. It is impossible to answer many questions arising from the incomplete form in which they reach us.

(2) A twenty-two-degree curve, which is 262 feet radius, is very small, but if the proper cars are used it will not make any difference whether the engine is on the end or in the middle. The number of the cars is of little importance, provided you do not attempt to pull them around too fast.

WHAT is the smallest size and the largest size frog in general use?

(2) What is the simplest rule for measuring a frog to tell its number?

(3) What lead do you give each frog?

(4) What is the address of the *Roadmaster's Journal*?—P. B., Olympia, Washington.

(1) For the main track of a trunk line it is not usual to use less than a No. 7 frog. The maximum is a No. 20. On side-tracks, even No. 4 frogs are sometimes used.

(2) Measure from the point of the frog to a point where the gage line is one foot apart. If it is 10 feet from the point to where the gage-line is 12 inches apart, the frog is a No. 10, etc.

(3) The lead for each number of frog is different. An easy rule to remember and one which gives very close results is as follows: Multiply twice gage (942) by number of frog, and this product by 7-10. This gives the stub lead; then add length of notch-joint, for that lead of turnout.

Example:

942 Twice gage.
10 Number of frog.

94.2 Theoretical lead.
.7

65.94 Stub lead.
15.00 Usual length of notch joint.

80.94 Lead of turnout.

(4) 83 Fulton Street, New York City, New York.

I SENT you a letter on March 27, asking if the piston of a locomotive stops to make the return stroke, and have not heard from you. Will you kindly advise in the next issue?—H. S. P., Pittston, Pennsylvania.

Your letter, and what we considered the proper reply thereto, appeared in the *Lantern* Department of the June magazine, page 124. We are glad to oblige at any time in pointing out past performances, but would appreciate it if our readers would look the numbers over closely. Frequently we receive letters on, say, *September 15*, asking us to answer a question in the *October number*, which is published on *September 10*. The November number is then on the press, so it is impossible to answer the inquirer before the December number. We must ask you to follow the magazine closely if you are interested in this department, and have

a little patience if your answers do not appear for several months. Frequently, too, it is necessary to send a question some distance so as to get the most correct reply from the best authority—and that takes time.

"Don't shoot the fiddler (or the editor); he's doin' the best he can."

G. B. H., Merkel, Texas.—We do not know of any device in use for varying the brake force at car-wheels in proportion to the load on the car, although the idea, as you know, is not entirely new. We cannot, however, in this connection, speak with our usual positiveness through unfamiliarity with the subject, and would suggest that you give a brief outline of what you have to the Westinghouse Air-Brake Company, Wilmerding, Pennsylvania. This firm can advise more to the point than any other of which we have any knowledge.

DO railroads employ civil engineers who have graduated through a correspondence course, or is it necessary to take such a course in college?—J. T. J., Columbus, Ohio.

It is generally the case that division engineers of railroads, to which you no doubt refer, have the degree of civil engineer. There is no hard-and-fast rule, however, regarding the source from which the latter is derived, ability to perform the work at hand being the main requisite.

J. J. M., Manila, Philippine Islands.—There is no such position, of which we have any knowledge, known as a qualified flagman; that is a position so designated on the rosters of the various railroad companies. The flagman on the majority of railroads in this country protects the rear end of the train, and, as a rule, has no other duties to perform. We have never heard of a premium being paid for the cleanliness of a caboose, as your letter suggests.

J. V. C., New York City.—Do not know of any such school in the vicinity of New York. In fact, we do not know of any outside of the well-known correspondence institutes usually found in the advertising pages.

ARE the signals used on railroads standard on all roads?

(2) Is a trainman required to carry an open-faced watch?—F. T. R., Plattsburg, New York.

(1) Practically all railroads use the standard rules of the American Railway Association, especially the whistle, air-whistle, and hand signals.

(2) No, this is of little moment, provided that the watch has a lever set. Watches with pendant set are generally objected to, owing to the liability of moving the hands in pulling the watch out of the pocket.

HERO OF THE HAIRBREADTH.

BY EMMET F. HARTE.

Honk and Horace Take a Wild Trip Down the Line with Dauntless Dick.



WHEN Honk and I built our gyroscope-car to gyrate around through the alleys of Valhalla, neither he nor I nor any one else thought much about

it. The principle of the gyroscope is so simple and well known that nearly every kid in the country has one. They can be bought at any toy-store for two bits—so, the apparently wonderful stunts you can do with them have ceased to astonish or perplex even the rankest Jasper in this marvel-working age of mechanical miracles.

This car of ours was constructed more for the sake of economy and utility than to be a thing of startling interest to the devotees of rubberneck.

Honk figured that a monorail wasn't nearly so expensive in its construction and maintenance as a double-railed track, and that the car itself was no more complex than a common motor-cycle; in fact, a fifteen-year-old boy could, and did, operate the fool thing after it was built. It was used for the purpose of delivering parcels about town.

We had originally planned a pneumatic tube system to cover that detail of the city's needs, but the P. and P. management got a bad attack of

chili con carne in their pedal extremities when Honk submitted his estimates. The pneumatic tube scheme was punctured before it got out of the garage, to use a mixed metaphor.

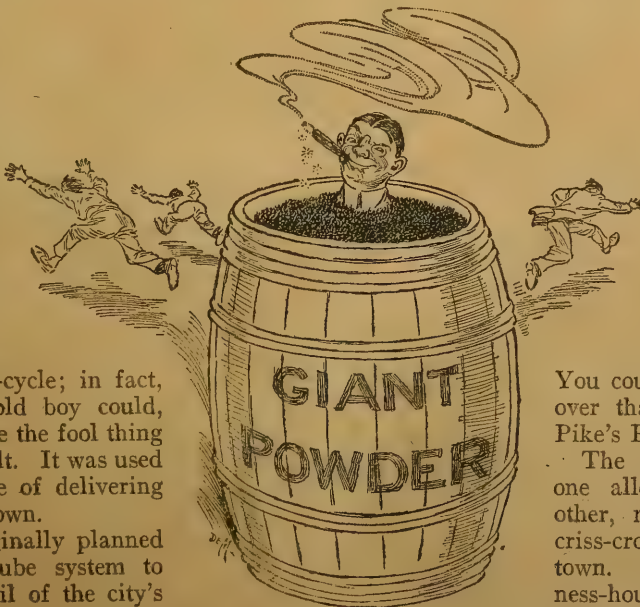
We gathered up all the old scrap-iron, grain doors, truss-rods, and cog-wheels we could find along the main line for three or four divisions, shipped it in to Valhalla, and built the outfit ourselves evenings and holidays. Its motive power was electricity from storage cells, as simple as a dollar-and-ten-cent door-bell.

Steve Jonagan, at the Hutton shops, cast the gyroscope itself for us. It weighed a ton, and we fitted it on ball-bearings so fine that once you got the thing to sizzling it would run for a solid week, I do believe.

The kid would leave it standing all night anywhere, out in the open, unpropped, buzzing, a way, and there it would stand as steady as a furniture-car.

You could no more push it over than you could push Pike's Peak.

The track was built up one alley and down another, making a complete criss-cross of the entire town. Not a single business-house or residence, flat, apartment, mansion, or cottage but had handy, com-



ONE OF DAUNTLESS DICK'S
PASTIMES.



RICHARD THE LIONHEART WASN'T A BIT DIFFIDENT.

plete, and impartial service. The kid would load up his parcels of groceries, green, staple, and fancy, dry-goods, hardware, soda-water, jewelry, shoes, or laundry in station order—rush orders first, and use discretion with the petulant patrons, of course—and away he'd buzz, making deliveries right and left, leaving in his wake a smiling host of pleased housewives. As the saying runs, there was nothing to it; it was a cinch.

All this preliminary pow-wow being removed from our chest, we will now turn our attention to the main show-actor of this play, who, at this moment, is due in on the red motor-car from Millardsville.

He brought his own announcement. Richard Cœur de Leo Todd was the way he'd been tagged some twenty-six years ago, he said, and he was either a big staller or a reckless frivoler with long chances. He had his nerve with him in either case; there could be no doubt about that.

He had come out to Valhalla, on the advice of a friend, all the way from far-off Chicago—a breezy burg—to rest and recuperate and catch a few million rainbow trout. He had a month's vacation, and he was going to do it right, that was evident.

Richard the Lionheart wasn't a bit diffident—not any. He was calling the train-crew by their first names when he alighted on the station platform, and his face lit up when he saw me, like I was nothing more nor less than his long-lost boyhood chum. The United States of America is an airy country. Wind assails you from all sides in zephyrs, puffs, and gusts, but Dick was all to the chinook.

He was of medium size, big-nosed, wide-mouthed, and full-eared. His hair and eyes were of the Van Dyke shade of brown, and he sported a pince-nez. He wore a drooping cigarette pendant from his lip ordinarily, and you never were in doubt as to who was the hero of his stories—that party was R. C. de L. Todd.

His life had been a twenty-six-year long revel of adventure. Witness:

At the age of ten months, while ensconced in a large rocking-chair in presumable safety, he had fallen, chair and all, out of a second-story window into a

concrete areaway which was surrounded by a spiked fence. No damage resulted except to the chair.

When a year and a half old he had strayed away and been lost in a sewer two days, alone with the rats.

At three he had been tossed by an infuriated bull—all bulls are infuriated, only some more so.

At four, he was dragged by a street-car; and, at five, trampled beneath the hoofs of runaway horses and stampeding elephants in a circus parade.

He admitted that accidents happen in the most conservative of families, and that little kids take chances because they don't know any better; but the proof of the intrepid soul is the courting of danger when arrived at the age of accountability.

To defy death and devastation, deliberately—there's euphony for you—to wade boldly into any old kind of peril, heedlessly, with sang-froid and ennui and sic semper raus mit 'em and all that—that's where you shine out as a hero, he said, like a comet with four tails. There was no mistaking the real article then.

In substantiation thereof, he said that

long before he had begun to shave, on the sly, with his pa's razor, and while he was yet in knee-pants and plaited coats he was a regular juggler with Fate. At the age of twelve, he said, he swam two miles out to a buoy in Lake Michigan, and, on the return trip, with a storm blowing off-shore, he battled fourteen long hours with wind and wave before he crawled out on the sand.

He asked me if I didn't remember reading about a boy hanging by his toes, on a wager, from the roof-coping of the Masonic Temple for twenty minutes. I confessed that I couldn't recall the hair-raising incident. He said that he was the boy.

In passing, he mentioned a few little eccentricities like going into a cage of tigers that had just arrived from Bengal; of smoking a cigar while buried to the chin in a barrel of gunpowder; of catching full-grown rattlesnakes with his bare hands, and of swinging down from the fourth story of a burning building on a live wire just before the walls fell in.

Since reaching his full maturity, this dauntless desperado had followed a line of hazardous occupations (to hear him tell it) that would queer his family as life-insurance risks for the next two thousand years. He'd been steeple-jack, lion-tamer, fire-fighter, member of the life-saving corps on Lake Michigan, looper of the gap, high-diver, trapeze performer, parachutist, and night-watchman in a powder-magazine.

At the present writing, he said, rather shamefacedly, that, when at home, he was holding down the humdrum job of mixer in a nitro-glycerin mill. He exhibited stains on his fingers which he said were caused by acids. I've seen the same kind from cigarettes.

Honk took quite a shine to the young man. He struck Honk as being most mild-mannered and unobtrusive. Pretty soon you could see the two of them bobbing around together, as thick as cockroaches in a damp basement. Honk said he was trying to keep the boy from getting bored on account of the tiresome sameness of our dull little village.

"That young daredevil," he remarked to me—"that reckless young blade, Horace, simply snaps his fingers in the face of any risk. He tells me that the crowning ambition of his life is to go over Niagara Falls in a barrel, or be lowered into the crater of Vesuvius when it's about to erupt."

"I've known one or two of that kind," I observed, without excitement. "There used to be a guy around Arkansas City who was

eternally groaning and taking on about riding bad broncs; said the breed of real buckers had become extinct, and quelling 'em was his one grand passion.

"One day, with my assistance, Mart Brady, who helped around the station, borrowed a dray horse from old man Potter. We put a few cockle-burrs under the saddle, and got this buster aboard after a lot of palaver. That old swayback plug laid back its ears, humped its spine, and threw Mr. Rough Rider into a pile of rock, breaking his leg in three places. He couldn't ride a saw-buck—that guy couldn't.

"Your real, bona fide, sure enough past-master of anything," I said, "don't go around yapping about his achievements through a megaphone. He perpetrates a few stunts and lets the admiring populace have ocular proof. This is a great age for having things demonstrated to you. Us Missourians—"

"Yes, I know what you're going to say," Honk interrupted. "I've heard the whole rigmarole, including the Ben Franklin and Abe Lincoln variations. But our friend Todd is a very sincere and serious-minded young fellow. He's no empty-headed, vapid braggart. You can't blame him if his life has been full of thrills. Don't be the human pickax, Horace!"

"Well, go ahead and soak up his yarns like a sponge. That is what tickles him. A greedy listener is all he wants to make him enjoy himself."

"He was asking me about grizzlies, yesterday," Honk said. "He wants to get two or three while he's here—"

"Alive?" I asked. "But, of course, he catches them alive—"

"I thought I'd take him out northwest into the hills a ways," Honk continued. "There ain't any grizzlies, but we might run across an old cinnamon, which would be better than none. Want to go along?"

"Sure thing," I said. "I want to see him perform, don't I, same as you?"

"I've borrowed a couple of wheels and some rifles from Gus up at the hardware store. We'll start about daylight. We can ride out that old Indian trail until we get into the breaks, then go on afoot. That will be better than hoofing it all the way."

"Anything is," I agreed.

We called at the hotel for Dick the following morning just as the sun was poking his red poll over the eastern rim. The dauntless one had about finished breakfast, so he joined us without delay.

"This morning reminds me of my boy-

hood days," he chirped. "I spent a year with my Uncle George up in the Saskatchewan country once, and we used to get up mornings like this and go after elk. Killed 'em by the hundreds for their teeth. An elk tooth is the same as ready money among the Indians."

"Ever use a telescope sight?" I asked.

"Very seldom," he said. "Only on very shy game like big horn and antelope. I'd rather pot a bear or a moose at close range, where you feel like if you don't stop him you're a goner. That's where the fun is—for me. Worst fight I believe I ever had was with a mountain lion—" and so on *ad nauseam*.

He claimed to be an absolute dead-shot up to one thousand yards with a 30.40, and, of course, laid it to the gun when he missed a few sage-hens at a hundred yards and a chipmunk I could have killed with a rock.

All you need to do is to go some four or five miles into the Mystic Hills in a north-westerly direction, and the country is as rough and wild-looking as anybody could ask for. But, saving a few bobcats and wolves, there isn't much big game rambling around.

The chances for running across that cinnamon bear Honk hoped for had about an even break with flushing a spitting pugnaticus or a wall-eyed wabbus. I feared that the worst encounter we would have would be with a ferocious rabbit or a man-eating woodchuck.

The three of us, trundling our wheels up the rocky trail, with our rifles slung over our backs like Arabs or Cossacks, or whoever wears 'em that way, began to labor at the exhaust a trifle. I was about to propose a game of three best hands out of five to see who went on after the game and who stayed and herded the bicycles. I'm no kind of a hunter myself. I never see the game until it's on its bounding way.

Dick declared he saw another chipmunk down alongside the hill. "A whopping one," he called it, "big as a dog," and he dropped his wheel and clattered down the steep slope through a growth of greasewood and thorn-bushes to get a shot at it. He made enough racket to scare all the game out of the county, but I was indifferent about that. It wasn't my game.

A minute later we heard a shot and a yowl and scratching and spitting. Honk unlimbered his gun and loped down to investigate. I moved on up a little farther to where the trail curyed around a jutting rock,

and where I thought I might be able to see what was going on below without too much physical exertion. I trundled the wheel up with me, laid it down, and assumed a reclining position myself. Then I peered over the ledge.

A drama was being enacted some thirty feet beneath me. Dick's chipmunk had turned out to be a big, rusty-looking bobcat, which he'd shot through one ear and made fighting mad. He must have dropped his gun down the cañon after the shot, for he didn't have it. Honk was behind, trying to get a bead on the cat, but couldn't because Dick was exactly in the way.

His rustiness was just mad enough to attack an army. He was coming, snarling and spitting, and that reckless galoot was just standing there rubbering to see where his gun had gone, as unconcerned as if kitty was coming to rub against his leg.

I was surprised. It takes a good one to stand still until a mad bobcat gets close enough to rip the features off him. I wondered if he was figuring on catching it alive. Then I remembered once having seen a man just after he'd had a free-for-all argument with a bobcat, and, as usual, I butted in.

I knew I couldn't hit the varmint with a Gatling, let alone one little measley bullet out of a rifle, so I reached around, got the bike, and dropped it, flat-ways, right plump on Mr. Bobcat just as he squatted to leap for Richard's throat.

Whang! Yow! Ss-s-s-st! Down the steep hillside went bicycle, bobcat, boulders, and bedlam!

"Hooray!" I yelled. "If he's shot between the eyes with a coaster-brake and twice through the body with a spoke, I'm the hero that shot him!"

"That's the system!" shouted Honk. "You fixed him!"

All I saw was a two-hundred-yard streak of rusty brown going up the ravine, clothed in expectoration. I was too weak to stand when they climbed back to where I was, after rescuing the lost gun and my bicycle. Dick couldn't seem to grasp the humor of it exactly; he looked bewildered more than anything else.

"Say?" I asked. "Was you going to take a chance at him slicing you, or was you too scared to run, or what?"

"It was great!" Honk mixed in before Richard the Lionheart could reply. "Nerviest thing I ever saw. For downright coolness, that took the pastry."

"What was the fuss all about, anyway?"

asked the perplexed Dick: "How'd you happen to drop the wheel? Scared? No. Scared of a woodchuck? Why, one time, up in the Michigan woods—"

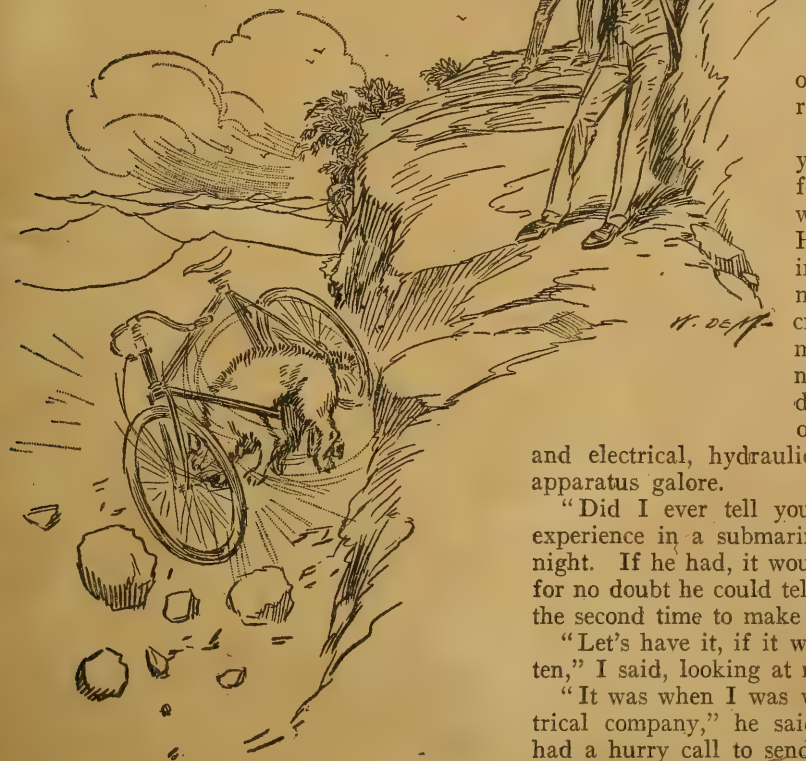
"Kiddo," I said, "shake! I know now you wasn't scared."

They insisted on going ahead with their hunt a while longer, but I couldn't see much to tramping on and on over those hills. Every mile you walk away from home means a mile and a half back. So I started off with my battered wheel, which had ten spokes broken, a tire rent, and the handle-bars twisted. I hit for the medicine house. Honk bowled in later, tired and hungry.

"We never saw hide nor hair of a bear," he said. "But Dick killed an eagle, and I



IT DROPPED ON MR.
BOBCAT JUST AS
HE SQUATTED
TO LEAP FOR
RICHARD'S
THROAT.



got two shots at a coyote. He laughed about that bobcat, and making you believe he thought it was a woodchuck. He says he's caught many a bobcat with his hands. He says they're the easiest things to handle he's ever tackled."

Dauntless Dick got to coming down evenings and sitting in a little friendly dime-limit game with Honk and me for pastime. During these sittings he related his marvel-

ous adventures. One reminded of another.

Often we had to yawn in his face before he would realize when bedtime came. He took considerable interest in Honk's mechanical idiosyncrasies—the solar motor, the perpetual motion, the half-dozen or so models of flying-machines,

and electrical, hydraulic, and aerodynamic apparatus galore.

"Did I ever tell you bout my thrilling experience in a submarine?" he asked, one night. If he had, it wouldn't have mattered, for no doubt he could tell it different enough the second time to make it unrecognizable.

"Let's have it, if it won't last longer than ten," I said, looking at my watch.

"It was when I was working for an electrical company," he said. "One day they had a hurry call to send a man right down to the dock to do some inside wiring. The parties said it was a particular job, so they sent me to do it. I took my kit and went down.

"A rowboat was waiting for me, manned by four sailors and a bo's'n. I tumbled in, and was flicked across to where a short mast of a thing stuck up above a speck of deck fenced in with a low, iron railing, and lying flat on the water. I stepped out of the boat onto the deck, and the bo's'n led the way

down a stairway into the inside of the craft. It was as fine a boat as I ever saw.

"The job didn't amount to anything; wiring for a set of fans, some push-buttons to call the help from one room to the other, and like o' that. It didn't take me half a day. In the meantime I got pretty thick

"You know a submarine attracts all kinds of fish. They follow along and gambol in swarms and droves after a submarine. It's wonderful to see them—wonderful! Some are almost as big as the boat itself.

"The captain said they crowded around the propeller very often so thick that every now and then a big fellow would get knocked in the head. The crowd would immediately gobble him up and race after the boat to help eat the next one.

"I was enjoying myself better than I ever can remember when the terrible accident happened. The propeller got tangled up in a school of fish—clogged, jammed, and snapped off close up to the hull. When the resistance ceased, of course, the engines raced themselves to ruin before the engineer could shut off the power.

"They wrecked themselves in the fraction of a minute. Having no

engines, the pumps couldn't be worked, the water couldn't be pumped out of the ballast-tanks, and there we were, twenty fathoms down, and likely to stay there.

"I was the only cool head on board when it came to the pinch. The captain just sat in a daze, and the crew prayed and wrung their hands. I assumed entire command.

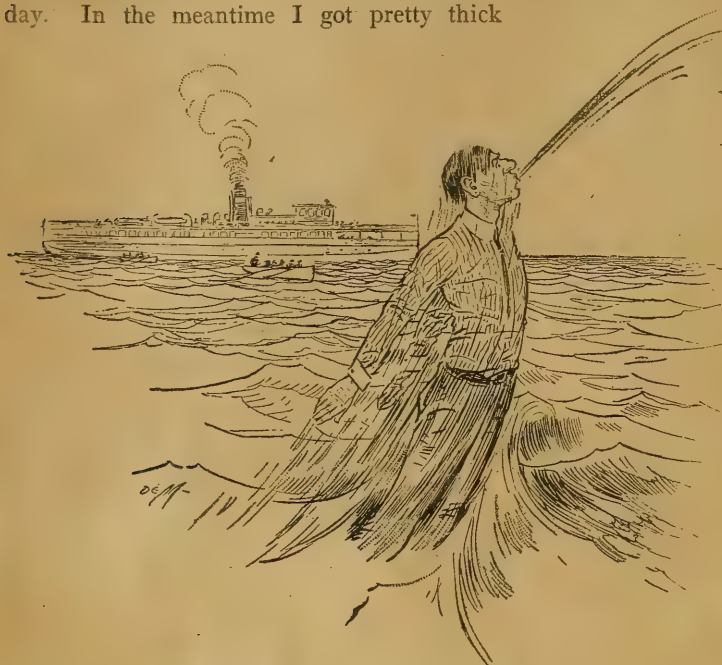
"How long will our air supply last?' I asked the engineer.

"Two hours,' he said.

"What pressure have we available for the torpedo tubes?' I asked next. He found out, and I figured a minute. We had enough to shoot the seven men on board besides myself to within twenty feet of the surface. You know, at a hundred feet down the weights and pressures are enormous."

"Yes," said Honk. "Hurry up! What did you do then?"

"Do? I clapped those fellows into the tubes, one by one, and fired them up through the water to life and air. It took a full fifteen minutes apiece to load, fire, and set the mechanism for another shot. Of course, with each man out, the air supply in the



"I LEAPED HALF OUT OF THE WATER. I SAW—"

with the captain, smoked his cigars, and swapped stories with him and such things.

"He told me the boat was one of the government submarines; she'd come all the way around through the Erie Canal and the Great Lakes without an accident of any kind. It was a fine boat, but I've forgotten the name of it; thought I'd never forget that boat's name, but I have. Just before noon, when I got the work all completed, the captain—"

"How'd they happen to be up in that neck of the woods?" I asked. "I didn't know they ever sent submarines around through the rural districts—"

"Oh, yes," said Dick airily. "They send 'em all over. This one was on a secret mission, the captain told me. He asked me if I wouldn't like to take a dive to the bottom of Lake Michigan. Would I? Well, rather. All right, sir! He just called in a lieutenant, or mate, or whatever they call 'em, and gave a few curt orders: 'Seal the hatches! Sink her twenty fathoms! Forward at half speed!' like that. 'Aye, aye, sir!' the mate said; and in five minutes I was gazing out a window, watching the big fish go by.

boat became better; but the unusual strain told on me so that it took me nearly half an hour to load and fire the last two men.

"The oxygen was all but exhausted then, and it was impossible for me to enter the tube, even if I had been able to manipulate the firing apparatus. Panting and half fainting, I staggered to the companionway that led to the upper deck. Then, gathering my strength in one supreme effort, I filled my lungs with that deadly gas, burst the hatch open in a frenzy, and leaped upward into the water that threatened to crush me like an egg-shell.

"I shot toward the surface like an arrow! So great was the speed of my ascent that I leaped half out of the water. I saw—"

"You saw Baron Marcus Munchausen, Joe Mulhatton, and Opie Dilldock," I offered, "dancing a jig on the water."

Honk gave me a pained look. Dick resumed:

"No. A large lake steamer lay hove to. Her boats were picking up our men as they came up. Every man was saved, thanks to my coolness and bravery. Congress voted me a medal for it. The submarine lies there to-day, at the bottom of the lake—"

I took a turn around in the open air for a few minutes then. That last one had aged me. I felt rheumatic. I went over to the power-house for a while, and listened to Butch Poteet's artless prattle about Ernestine to get back to normal. A couple of hours later, when I returned, Dick had faded away, and Honk sat with the fixed gaze of one stunned.

"Well," I remarked, "what's new?"

"Dick wants to run the gyroscope-car over to Millardsville, some time," Honk said. "He thinks it's a great invention."

"Don't let him," I admonished. "He'll take it to Europe and be doing the loop-the-loop with it when you next hear of him."

"I dunno. We might let the kid take him over. It must be dull around here for him."

"Say," I said, "I've got a scheme. You know the cañon southwest of town? About five hundred feet deep, ain't it, in one place? Run a rail out there and stretch a wire cable across, then let the kid take Dick over for a thriller."

"The kid wouldn't do it. It'd scare him to death."

"I'll risk a good nickel cigar he'll do it," I said.

"It's a bully good scheme," said Honk, with enthusiasm. "We'll make it a feature in our next folder advertising Valhalla. The wonderful ride through the air!"

He was out at daylight the next morning, getting a force of men started on the happy project.

I took Buttsey Blair, otherwise the kid, with me, and we walked down to view the cable bridge across the chasm when it was completed. He looked it over with the air of an expert.

"Would you be scared to run the car across it?" I asked him.

"Me? Naw, I'll run her across, if Mr. Simpson'll guarantee it's stout enough. She couldn't fall off, you know."

"Buttsey," I said confidentially, "this windy Dick Todd up at the hotel wants to do something desperate, and we've fixed this up as a surprise for him. If you can sort of touch him up a little when you take him across, there'll be a birthday present in it for you; but mum's the word. Don't you hint it to him about this cañon before you get him out on the cable."

"All right, Mr. Horace," said Buttsey. "I've heard this mutt a braggin' a'ready, an' I'd just like to have some fun with him myself."

Dick came down one evening, after the ten feet of concrete had set thoroughly around the anchors of the cable, and we were ready to spring it on him. He sat and gazed a while, mentioning a few improvements that would help the car. He thought it ran too slow, for one thing, and was as devoid of thrill as a wheelbarrow.

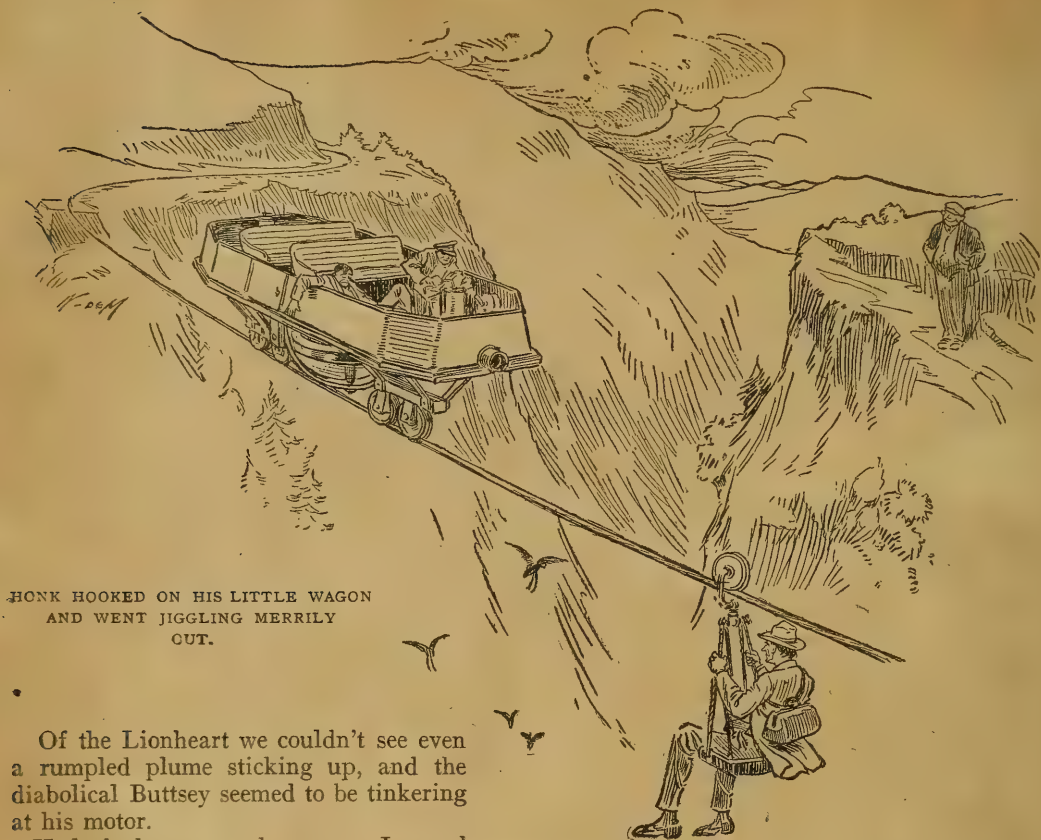
"We'll have the kid take you down to the South End Park, some of these days," said Honk carelessly. "There's some awe-inspiring scenery down there."

Dick said he would be tickled to see something of that character for a change.

The next day being favorable, and Buttsey getting his parcels delivered by ten o'clock, we hunted up our victim and set out with him.

When we reached the park, Honk and I got out, on a pretext of looking after some imaginary improvement or other, and told the kid to take Mr. Todd on out to the end of the line and back. He kept asking where the much-lauded scenery was.

"Wipe off your specs and get ready," said Buttsey. "We'll come to it just around this curve," and away they went. Honk and I made a cross-cut through the weeds, thinking to arrive in time to see them on the return trip. When we came out on the edge of the cliff, we saw the car stopped about midway of the swaying cable and standing suspended over the abyss.



HONK HOOKED ON HIS LITTLE WAGON
AND WENT JIGGLING MERRILY
OUT.

Of the Lionheart we couldn't see even a rumpled plume sticking up, and the diabolical Buttsey seemed to be tinkering at his motor.

He looked across and saw me. I waved a friendly hand.

"Hey, Mr. Simpson," he called excitedly, "we're stuck out here. I stopped to let this guy get the wort' of his money. He was down on his hands an' knees a beggin' to be took back, an' now he's layin' here on the floor, croaked or somethin'. He flopped over when I couldn't start her again. Honest, I can't start her! What'll I do?"

"You're scared," Honk told him. "Try it again. Disconnect and examine your coils. Maybe you've got a hot bearing somewhere."

The Kid did some more tinkering, and swore that he couldn't locate the trouble, high or low.

"Why don't your friend take command, now?" I asked Honk. "He could fire 'em out of the torpedo tube." Honk glowed at me.

"You're to blame for this," he growled. "It's serious. It's just a question of the gyroscope running down in ten or twelve hours, and they will fall off."

"Go out and fix it, then," I said. "Take my umbrella, if you want to."

Honk seemed to be alarmed all right, for he set out on a dog-trot for town. In half

an hour he returned on a wheel with a bag of tools and one of those little pulley-carriages the telephone linemen ride in when they're putting up overhead cables. Dauntless Dick had revived and fainted again, and Buttsey had partly lost his nerve.

Honk hooked on his little wagon and went jigglng merrily out. I doubt if he enjoyed it as much as I did. He didn't look it. It took him ten minutes to locate and adjust the hitch when he got aboard, and the hardest part was getting aboard.

Of course, it was dangerous, but I couldn't help smiling a little. Honk got sore because I did, too.

The car rolled on the solid earth again and stopped. We gave Dick the artificial respiration treatment, and rubbed and wallowed him back to consciousness. He was a reformed daredevil, and no mistake. He was gentle as a lamb.

"Look at his hair!" I exclaimed, horror-stricken. "He's getting gray."

It was true. When we got Richard the Lionheart back to Valhalla, his hair was as white as the whiskers of an amateur Santa Claus.



Flashes from the Headlight.

CONTRIBUTED BY OUR READERS.

Here Are Some Railroad Stories that Are Spick-and-Span and New, Just from the Shops, Ready for Their First Run.

TIT FOR TAT.

TWO elderly spinsters were bound for Duluth. In the hurry and flutter of the railroad journey, they rushed aboard the train before thinking of the necessary formality of purchasing tickets.

After securing seats, the elder of the two be-thought herself of the tickets, and hurried out to the ticket-seller's window. Fluttering with excitement, her nerves all on edge, she rushed up to the window, gesticulating, and shouted to the agent:

"Two—to—Duluth! Two—to—Duluth!"

The dispenser of the pasteboards looked up and, never batting an eye, waved back, and answered:

"Ta-ta, ta-ta! Oh, you kid!"

WHY HE WEPT.

CRYING bitterly beside the wreck of a de-railed engine from beneath which the wreck-ing-crew were removing the bodies of the engineer and fireman, stood a small boy who had been steal-ing a ride on the pilot.

A kind-hearted conductor bent over the little fellow and sought to learn the cause of his grief.

"What's the matter, son?" he said. "Was your daddy on the engine?"

"No," sobbed the youngster. "I lost my hat."

HOW IT HAPPENED.

A BOOMER brakeman being the only survivor of a rear-end collision, was called upon the carpet to tell how the accident occurred.

"You see, it was this way," he said.

"We was mopin' around the curve about sixty-five miles per, when I looked out and seen a stack of reds on the main.

"I gave the grand hailin' sign of distress and notified the skillet-head on the front end. He throwed her into the breechin' on two pipes of sea-shore; he give her the secret works and began to sound the bugle-call.

"Then I makes a high dive and disappeared into the atmosphere."

"That will be all," said the superintendent. "You are excused."

SMOKE IN THE SMOKER.

ALL the cars being crowded, one hot day last summer, on the train which runs between Vallejo and Suisun, California, a number of women and children took seats in the smoking-car, with the result that all pipes went out and several half-smoked cigars disappeared through the open window.

"All but one, however," says the old Civil War veteran who tells us the story, "and that was a vile weed in the mouth of a young smarty, wearing a cheap suit, who stood in the doorway, letting the nauseating fumes of his cigar sweep back into the faces of the women and children.

"I finally became so disgusted that I went over to him, and said: 'Young man, if you will throw that stinker away I'll give you ten cents.'

"The young hoodlum only laughed, and said: 'Now, if you had said fifty cents, I might do it.'

"Well, fifty cents, then," I replied, 'but, before I pay it, I want to tell you that if the Chinese who made that cigar was here to see you smoking it, he'd go home and tell his folks how proud he was that he wasn't a white man.'

"Smarty tried to answer back, but I had the whole car laughing at him by that time, and was ready to put on the finishing touches.

"Young man," I said, 'I have used tobacco for

more, than fifty-five years, but I'll be hanged if I ever saw the time when I didn't have sense enough to quit smoking in the presence of women and children.'

"That was enough for Smarty, however. He had thrown away his cigar and darted into the car ahead to get away from the storm of laughter and hand-clapping which greeted my remarks.

"For the rest of the trip the smoker was smokeless."



A MIXED MESSAGE.

A FRIEND of a family residing in Mountain View, New Jersey, in which a death had occurred, sent the following telegram to an undertaker in a near-by town:

MOUNTAIN VIEW, N. J.

To E. R. RICHARDS, POMPTON, NEW JERSEY:
Come at once. Adult.

JOHN DOE.

The message fell into the hands of a student operator, who delivered it to Z. Richards, a cousin of the undertaker, and a butcher by trade. On delivery it read as follows:

MONTCLAIR, N. J.

To Z. RICHARDS, POMPTON, NEW JERSEY:
Come at once, a bull.

JOHN DOE.



WHAT A ROADMASTER RECEIVED.

MR. J J WHITE, ROADMASTER,
Sir in redgards to Mr Jones' lettr of
July 6 about th Switch lamps, om my secon

Do you know a good story for "Flashes from the Headlight"? If so, why not send it to the Editor?

ENGINEER RISKS LIFE TO SAVE CREW.

With the Woods Blazing Fiercely on Both Sides and a Loose Rail Ahead,
He Sticks to Throttle.

A RECENT forest fire at Park Falls, Wisconsin, has brought to light a hero whose achievement is believed to equal anything on record in the way of coolness, courage, and the exercise of good judgment, under trying conditions.

General Manager Atwood, with Superintendent of Logging Brackett, Railway Superintendent Wright, Superintendent of Motive Power Gregory, Head Car Repairer Overdahl, Chief Electrician Jacoby, and a crew of picked men from the company's shops here, took an engine and caboose and ran out to the fire zone.

They found a perfect hurricane of flame, the very atmosphere apparently being on fire on both sides of the track. Conditions seemed to grow worse as they proceeded, but they endeavored to push their way through the fire to where a train of cars was standing at Hollinger's spur.

I am soire to say it but it is imposable for me to make this lamps burn with such oil as I am furnished With this month it looks more like muddy Water then oil and it Wont burn 12 hors att ole I am litig all of the lamps daly and July the fifth I found 4 lamps out of 9 burning but since that time I hav not bin able to find aney att ole. I find the lamps failing so I claned out the Wicks and pord out the old oil and had a new can So i tried it it Was just the same if you will send me good oil I will keep them burning but with this oil it seems to be imposable to do it.

Yours respectfully

J BLANK.



THE ENGINEER'S JOKE.

NOT long ago a new road was built into Car-rizo Springs, Texas, and on the day that the first train was run into town the farmers had gathered from all over the country to watch for its arrival, many of them never having seen one before. They were sitting on the platform and on the roof of the station when the engineer brought the train in at full speed.

As he slowed down he put his head out of the window and yelled: "Look out, I'm going to turn around!" and the farmers, badly frightened, scattered in all directions.

"I thought that if he was going to turn around, he would have to do like we do when we turn a wagon," one of them was heard to remark as he walked sheepishly back to the station with the rest of the crowd.

Rounding a curve, they ran in between a large pile of ties on one side of the track and some timbers on the other. Both piles were a mass of seething flames. As they rode into the sea of fire, Engineer Emory Juneau, looking ahead, saw a rail kinked with the terrible heat. To proceed would derail the engine and car and would mean certain cremation for the entire party.

Quickly and coolly he applied the brakes, reversed his engine, and released the air again. Then, throwing himself flat in his cab, he succeeded in bringing the blazing car out of danger.

Although the whole proceeding took only a few seconds, it seemed like an age to all of the party, who were penned in like rats in a trap, and it was long enough for the car to catch fire, both inside and out, many of the party being severely burned in the interval.—*Green Bay Gazette.*

ON SHORT TIME.

BY HORACE H. HERR,

Author of "Being a Boomer Brakeman," and "The Evolution of 'Almost.'"

Bartholomew E. Goldsworthy Tries Hard to Please a Very Pretty Young Lady.

CHAPTER III.

Why Bart Was There.



ADVISED Mr. Martin that the roadmaster would report to him in a few minutes, and as no one seemed anxious that I remain in the special car, I went over to my dog-house, where I knew I would be more at home.

Going through the private car, I caught another glimpse of the young lady and a dignified elderly woman, who, I found out later, was her mother. When I reached the caboose, Bart was in an awful stew.

"Where's your comb and hair-brush?" he asked, with a show of irritation.

I removed my hat, bringing into view a dome which is as devoid of hair as a pool ball.

"Does that look like a loafing-place for hair?" I asked. Then, remembering that "Dude" Bowling always carried a kit of tools in his pocket, I volunteered to see what I could do for him. Bart finally got his crop of black locks placed to suit him, and although he didn't look entirely happy, he climbed over to the platform of the private car and went in.

If I could have cashed that mind bet I won during the night, I would have been glad to give up half of it for a reserved seat back there, for I felt sure that something was going to come off that would be worth watching, even if a fellow couldn't have a ring-side seat.

However, as it was an invitation affair, I had to crawl out on top of the cupola and let my feet hang over, and try to figure out

what kind of a new game I had encountered.

Of course, a fellow forgets the ordinary things which occur on a trip just as soon as he has made out his trip ticket and figured up his overtime.

I had met up with a few unexpected and peculiar events in my time, but none of them resembled this one, and I couldn't help but wonder if Bart was really Count von Sneeze in disguise or an embezzling bank cashier hiding out.

This was the one thing I was unable to put out of my mind.

When we rattled over the high switch at Winslow, Bart had not returned from the conference in the general manager's car. I took my time washing up, even polished my head, and tried to get a little mud off those good black trousers; and still Bart did not show up.

As my flue sheet felt as if it was just about to drop if I didn't get a cup of Java and a sinker pretty quick, I wandered up to the station, registered in, and proceeded to wrap my legs about a lunch-counter stool and order about a dollar's worth of ham and eggs.

And still Bart failed to show up.

Knowing that within a few hours the call-boy would be after me to serve the rest of my sentence on the cinder train, I went over to the adobe to grab what little shut-eye might be waiting for me. After I once got those tight shoes off my feet, and stretched out in bed, I started in to figure out just what this Bart Goldie affair really was, and I'd be willing to bet a hundred hat-checks that I would have figured it out inside an hour if I hadn't gone to sleep.

When a fellow has been up all night wrestling box cars and fighting to keep himself from hitting some lop-eared wise-head like Bennett in the nose, no sentimental love affair, not even his own, is going to keep him awake.

You know the Honorable Charles Flynn used to hand out a morsel of wisdom as a premium with every sale, and the last pair of gloves I bought over there brought me this, without any extra charge: "A railroad man has just as good a job as a king, when he's asleep." However that may be, for the next eight hours I was satisfied with everybody and everything.

When I finally opened my eyes, Goldie had come in. When he saw that I was in my right mind again, he did a most unexpected thing.

"Why don't you hire that snore of yours out to the roundhouse for a whistle?" he asked.

I thought that was real fair for Goldie—the nearest to a joke he ever had approached voluntarily. Any one could see that he was in a festive state of mind. I couldn't have been more surprised if he had started to sing "Love's Old, Sweet Song."

"Don't get fresh, young fellow, just because you have been hobnobbing with an official. Where have you been all day?" I asked, in the hope that he would say something of vital interest.

"In Martin's car most of the time. In Arnold's office the rest of it."

"Well, anything startling?"

"Yes," he replied. "Several things." Then he went to playing "Marching Through Georgia" or "Who Killed Paddy's Goat?" with his finger on the table, and him a knowing all the time that the Sewing Society was waiting for a wee bit of gossip, so to speak.

"For one thing," he began after a time, "we are going to run the cinder pit one month longer this year than they did last, and I've asked Mr. Arnold to see that you have one of the work trains as long as the pit is worked.

"Oh, thanks, and again thanks, kind sir," I spouted at him. "For good behavior the prisoner will be allowed to serve another month after his regular term."

"After that is done," continued Bart, "we will put in a gravity pipe-line from the lake on Bill Williams Mountain to Winona and do away with the hauling of water over there."

"Why not tap Niagara Falls, or pump the

water from the Colorado River into the Grand Cañon?"

"And if they follow out my suggestion, we will put in reinforced concrete bridges and culverts over the entire third division."

"Bart," I growled from the depths of my shirt, which refused to go on because the sleeves were wrong side out, "you talk like a rusty phonograph."

"It's no wonder. I've been talking all day. I had to convince every one that these things were possible and for the ultimate good of the road."

"Of course, all this conversation was very interesting to me, in view of the fact that I was thinking of the young lady. Bart dropped into silence, and seemed to have gone so far in that there was no chance of his getting out alone, so I threw him a line.

"By the way, Miss Martin isn't as good-looking as one would expect a general manager's daughter to be."

"What's the matter with her looks?" snapped Bart.

"Her hair is too gray, and the wrinkles in her face—"

"Oh, you saw Mrs. Martin. Lois has dark hair and brown eyes."

Well, that sounded a little closer to the real news, so I tried again.

"That's funny. I thought the young woman was the hired girl. She seemed rather interested in watching you at the wreck last night."

"How do you know?" asked Bart, with real interest.

"I saw her standing down near the wreck for almost half an hour."

"That accounts for it."

"That accounts for what?" I asked.

"For her lack of surprise when I—say what are you after anyhow, information?"

"Well, I'll tell you, Bart. I'm trying to save my life. If I don't get the straight of this affair pretty soon, I'm going to expire."

Bart Goldie threw his head back and roared. The roar gradually simmered to a cackle and ended in a series of silent spasms which shook all of his six feet of anatomy. If a fellow could sell that kind of a laugh by the can he could make a fortune. By the time he finished, I had inhaled enough of the fumes to produce a grin on my own face.

When he had enough of it out of his system to allow him to talk, he said:

"You old woman! The idea of a man

reaching the age where ne speaks of the hair on his head as 'it,' and still being hungry for gossip. Well, Baldy, I have a mind to tell you all about it. I'll have to tell some one pretty soon, or there's going to be an explosion."

"Go as far as you like, Bart. You've got the main line all to yourself."

That's just how I came to find out that the Honorable Charles Flynn was absolutely correct, and Bartholomew E. Goldsworthy came to Arizona on account of his family troubles, and his family troubles came along as a second section and caught up with him.

It wouldn't be right to unload all he told me that evening, and I couldn't begin to tell it like he did, for there are no mandolins and guitars playing in the distance, no Arizona dusk, no great big sense of loneliness, to make up the proper setting.

After Bart Goldie had drifted through the sheep-skin factory, he apparently awoke to the fact that he had wasted about four years of his life and a whole lot of the governor's money, cultivating a football crop of hair.

As the governor wasn't in the mattress business he didn't have much use for hair, and I guess there must have been a little stormy conversation, after which the governor locked the safe which held the incubating bonds and went home, informing Bart that when he had amounted to something more than a village sport with its hair parted in the middle, he would be glad to have him come into the business.

It seems as if Bart grew real peevish about it, and informed the governor that he could get along without a parental helper, even if he had to double the hills, and they let the matter rest right there.

But I guess that while Bart put up a loud whistle the steam was really very low. He didn't say as much, but by plain addition and subtraction, I figured out that he was just about to ask a young lady to marry him, banking on father for the price of the marriage license and the first month's rent.

The young lady was Lois Martin. He had met her in college, and, having been the genuine football hero, he was a favorite in the betting.

After the governor cut the train line, Bart began to think it over. He couldn't ask the girl to live in a box car when she had been used to a Pullman, and he seemed to realize that he wasn't going to have a great deal of luck when he tried to persuade her father,

when, technically speaking, he should have been arrested for having no visible means of support.

He knew that Martin was a railroad official, and at that time he was connected with an Eastern trunk line, and believing if he, too, went out and made good at the railroad game, papa would be more apt to favor him, he started out gaily as a light extra for the West.

A year passed without seeing Bart made president of a road. He kept going farther West until he landed at Winslow and fell into the place of roadmaster of the third division. In the meantime, the Eastern trunk line, by one of those juggling stunts, came into control of the A. and P., and Martin was sent out in the capacity of general manager to improve the property and bring it up to the standard of the Eastern road.

That's about the how of it. I'm not saying that Miss Martin could not have given the why of it in a very interesting way, for an innocent bachelor who don't know more than enough to enable him to sign the dotted line on the orders and copy car and seal numbers, should never speculate on what a woman might say.

I will venture this much: that if she had known that Bart Goldie was doing his lapse, working day and night like a heathen, forgetting to go after his pay-check about half the time, just in the hope of some day amounting to something more than a section boss or a roadmaster, she would have been mighty proud of him, no matter what kind of a woman she was.

"I'm going to have this woman, some day," remarked Goldie that evening when he saved my life. I'd have died if he had not told me. "And before I have her I must make good. Make good in a big way, Baldy. I'll do it some day, but it has to be soon. I'm afraid some one will rob me of the one woman in the world. I'm running on short time—that's what worries me."

Of course, I'm not much at advising in a love affair, but Bart was so earnest about it I had to say something.

"Yes, I understand," I said, although he knew I didn't understand, and I knew it, too. "You're on short time, Bart, but the track's straight, and if she ain't asleep at the switch, she'll see your headlight coming and keep in the clear until you arrive."

I don't suppose that meant very much to him in the way of encouragement, but if he had known that I was so cock-sure that he was going to pick up the girl that I bet my-

self a million dollars against my last insurance receipt, he would have felt better.

Yes, sir, I made that odds-on bet, just on form. If I had waited another month I would have doubled it, for after Bart Goldie found that Lois Martin was in our neck of the woods, he began to make things move.

When he started he went some place. You never found him waiting on a siding. He was always on the main line, and he had a way of making things go that made a hit with every man on the division.

You know just how nervous a fellow feels when he finds he's on short time. You leave the last station with more than running time in which to make your meet, and get about half-way over when you find a box so hot it has to be packed at once.

Again, the hog gets to slipping or won't steam, and one minute follows the other until you look at your watch and find that you have just enough time to get there without figuring for the five minutes in the clear. You do the hurdle race over the tops for the head-end and find the eagle-eye with his watch in his hand, and the fireman just about to get down and push. By that time you have eight miles to go in eight minutes on a grade that would be steep for a flying machine. You know you should run for it with a flag, and you're not sure but that even then the old man is going to present you with a bunch of brownies or a tin can, and finally you decide to take a chance.

There is just one more curve, and then it's straight track, and you keep chugging away, promising yourself that if you get out of this without losing a piece of your cuticle, you will establish squatter's rights on the next side-track; if you haven't enough time to make the next station and clear by a week.

You get around the last curve onto the straight-away, you see the other fellow fogging into the station four miles beyond, and you wonder if there is any possible chance of his having gone blind since the doctor examined his eyes. Of course, the other fellow is just as anxious to avoid a main-line meet as you are, and while he blusters around a bit when you crawl in over the switch with your tail between your legs, you know that he knows that the next day you will probably be waiting for him and he will be dealing in short time.

I suppose Bart felt the same way. Martin's headquarters were in San Francisco, and the family made its home there. A large number of fellows in San Francisco are in the market for housekeepers, and there was

always the chance that some fellow would come along and take Bart's running orders and go ahead of him.

While he never said as much, I'm sure that worried him as much as anything else.

A few days after Bart and I were back on the cinder-pit work, we were in the clear one morning at Bellemont for No. 7. We happened to be standing at the east switch when the varnished wagons came in, and when they stopped, Martin's private car, which was on the rear, was just opposite us, and Miss Martin and her mother were out on the observation platform.

Bart saw her just as quickly as she saw him. She beckoned to him and he went over for a chat. No. 7 had cleared our switch by fifty feet, and if I had been a real conductor I would have pulled out, but I waited for Bart to have his little talk, and when No. 7 began to move it looked for a time as if Bart was going to hang on the end gate. However, he finally let go, and with a wave of his hand came back to earth and the cinder train—his face glowing like one of those electric signs.

I never had to work so hard in all my life as I did the rest of that day. It looked as if Bart wanted to pull down that cinder mountain and haul it away to ballast the track from Bellemont to Albuquerque, not less than three hundred and fifty miles, before quitting time.

That was on Friday morning. I know, because we had mackerel for breakfast and sardines for supper. Sunday morning, Bart said he was going over to Williams for the day on a little personal business, and that he would not be back until the local Monday morning. He told where he wanted the work to begin on Monday, and I promised to have a string of loads ready to leave when he came in.

I knew that the Grand Cañon was just sixty-three miles from Williams, and that No. 7 connected with the plug which went out of the cañon in the morning, coming back at night in time to catch the night limited, which went through the cinder pit like a fellow who never had smallpox going by a pest-house.

But I didn't say a word. If he wanted to go around spending Sunday in riotous living, when he should have been resting up so that he would be able to earn his money, that was his business.

Just to show how valuable a man he was, the pit opened Monday morning the same as if he had been there. I told him when he

got back that he hadn't missed him a bit, and, so far as I was concerned, he could take every other Sunday off if he wanted to. I had forty loads coupled up and the engine on them a long time before the local showed up.

However, when the local did come, Bart was on it. At first, when he dropped off the caboose I wasn't sure it was Bart, for he looked more like a traveling man from a gents' furnishing-house than he did like Bart Goldie or a roadmaster.

He had a brand-new outfit, from his shoes to the black hat, a real white shirt, and a stand-up collar that reminded me of the sand fence down near Hardy; a gray suit, which, while it wasn't as noisy as some I've seen, was pretty loud for a quiet little hamlet like the cinder pit, where about the only things of color were the cook, the water-flag, and the semaphore.

He was carrying a suit-case, one of those kind which keep a fellow guessing whether it's full of thousand-dollar bills or interest-bearing bonds, and he wore the clothes and carried the suit-case just as if they belonged to him.

He didn't go over to the pit after he alighted from the local. Walked up to me first, and asked:

"How's everything? How soon will you be ready to start out with your train?"

"Everything is in better shape than it's been this year," I replied, taking off my hat and standing on one foot. "My train has been waiting since daybreak for you to show up."

I thought that might take some of the starch out of his shirt. He only smiled and started for the caboose.

"Let's go then. I'm ready," he said, and a few minutes later we were bumping over the switch, and with that once closed and "Dude" Bowling in his usual roost on top, I went inside, took my hat, and began dusting off the office-chair and making things just as tidy as I could.

But my efforts failed to appeal to Bart. He opened up the fancy carpetbag, took out his old khaki suit, and started to change his clothes. During the operation I endeavored to extract a few morsels of information.

"How did you find everything at Williams?" I asked.

"Oh, all right," he answered.

"Be quite a place if it had more houses, don't you think?"

Bart was trying to get out of that white shirt without using a can-opener, and he

failed to reply. After he had solved the puzzle, I continued.

"Nice place to spend Sunday?"

"Yes," he replied, and I didn't know whether it was a question or an answer.

"Have a good time over at the Grand Cañon?"

I naturally expected him to show a little surprise, for he had never told me he was going to the cañon, but he took it very common-like.

"Fine. It's a great place."

"Yes," I replied. "It is quite a hole in the ground. I remember when old man Cameron started to build it. Did you see Cameron?"

"No," answered Bart, which was rather surprising, for Cameron runs the one hotel, and if you eat there you have to see him.

"Go down the Bright Angel trail?" I asked.

"No, I didn't have time," explained the roadmaster, which is rather peculiar, for everybody who goes to the Grand Cañon goes down the trail, because it's about the only place to go.

"Did you see that mountain of green rock right at the end of the spur, where they always set out the special cars?"

"Yes," replied Bart. "I believe I did."

Now, there never was a mountain of green rock, so far as I know, and I was thoroughly convinced that Bart had not seen much of the scenic landscape.

"Mr. Martin's car was supposed to be at the cañon, Bart. Did you see it?"

"Yes, I saw it."

"You mean you saw her, don't you?" I questioned, determined to show him that I was a pretty wise old head, even if I had never been in a divorce court. Bart looked up at me with a sheepish grin, and I'm sure he would have confessed, if it had not been for the fact that when the engine hit the grade beyond Bellemont, the slack run back and one of the drawbars came out, bringing with it an end-sill.

Bart found himself looking for minnows in the water-keg, and I went to a finish, catch-as-catch-can, with the caboose stove. Of course, I was giving away lots of weight, but I think I could have won the match if the stove hadn't put a toe-hold on me, and when Bart pulled the stove off, I couldn't get up. My leg was broken in two places. That was once I didn't have to help chain up.

"I'll go over and help them tie the cars together, and as soon as we get to Riordan

we will take you in to Winslow and they can fix you up at the hospital," said Bart as he left the caboose.

CHAPTER IV.

The Other Man.

HAVING found the United States of America rather small and crowded at times, a hospital made a big hit with me. I guess I had been sleeping on a board bunk so long that I couldn't appreciate a little white crib with lace on the blankets. A fellow who has grown accustomed to tying his legs in a slip-knot round a lunch-counter stool doesn't relish his rations when they are dished up on a tin boiler-head alongside his bed. As they had one of my legs strapped to a railroad tie, I wasn't in a very good position to make much of a protest.

It would not have been so bad if I had not realized that there were things going on up around the cinder pit and the Grand Cañon which, while they didn't exactly touch on my future happiness, made my condition a little restless. It was just like missing a couple of chapters in a continued story.

Denny Reagan dropped in every now and then to tell me the news—but when a fellow is feeling seven kinds of pain in his leg and has a chronic grouch, he can't become interested in such common little things as the stripping of the 660, and the smashing of Tim Jones's caboose.

After I had been hanging around the nursery for about a week, Bart came in over Sunday, which was all the evidence I needed to convince me that private car No. 8 and the general manager's family had left the Grand Cañon; and while Bart said very little about the young lady, he did keep me pretty well posted on what was going on along the third division.

By the time I had been cribbed up on crutches so that I could hobble about, the ballasting was almost completed and Bart was starting in to build the concrete bridges.

Every man who came around the hospital had something to say about the quality and quantity of work which had been done by the new roadmaster since he came on the job, and when a fellow does a whole lot of good work it's a safe bet he has an inspiration back of him. I knew that, so far as Bart was concerned, he still had hopes.

After about three weeks, I began to get accustomed to my hospital surroundings and decided that they were not half bad.

For several years, I had been paying one dollar every month from my check for the hospital fund, and while I had the chance, I made up my mind to get my money's worth.

It grated on my nerves to think of a big rough-neck like myself being waited on by a trim miss in a blue-and-white striped dress and a fussy little marker in the way of a white cap.

At first, I really balked, but while I was flat on my back I had to stand for it, and by the time I was able to sit up, I rather liked it.

Miss Fowler was one of those trained nurses who knew more about people than the doctors do. She came from some cross-road town in Kansas. As I passed through that State once, we felt like we were old acquaintances. She knew the Union Depot in Kansas City, and remembered the big linseed mill at Fredonia, and she had a brother working in the shops at Newton—well, you know, I knew all those places like a book.

It was just like meeting somebody from home, and we would talk about old times whenever she could leave the other patients.

I reached the place where I thought she was a real amiable little woman, and when I hobbled over to the Harvey House for dinner the first time, I asked her to go along, and I'm a goat if she didn't go. We had something to eat and quite a bit of conversation, but I don't recall any particular item on the switch-list.

Mending a broken leg, especially where there is only one nurse and a doctor to help, keeps one awfully busy, and for a few weeks I almost forgot to worry about Bart.

I felt mighty ashamed of myself when he came strolling over to the hospital veranda one Sunday afternoon after I had served six weeks of my time. He looked just as big as he did the first day I saw him. He had burned almost copper, but aside from that he was all right—just the kind of man who would set a woman's heart palpitating like an overworked air-pump, and I was glad Miss Fowler was busy inside the building.

Bart put in an hour giving me a train-book record of events on the third division. He was just popping off with enthusiasm, and I was somewhat surprised, but none the less pleased, to note that his affair had been progressing very satisfactorily, even though I had been asleep on the worry job. I think Bart was just about ready to crack a joke, when our little lodge meeting was rudely interrupted by the arrival of something.

I'm not sure to this day what it really was. It wore one of those greasy black stacks, a walking-stick, varnished kicks with gunnysacks wrapped about the tops of them, a bartender's vest, a preacher's coat, and its trousers might have come from Holland—or may have been bloomers.

I felt rather sorry for the fellow at first, for he had lost one of the glasses from his specs, and he sure had a hard time keeping the one remaining in his eye.

He came up on the veranda and asked one of the bad-order squad if Mr. Goldsworthy was about. Bart spoke right up and pleaded guilty to being the party.

"Ah, indeed. How fortunate," said the bunch of clothing, as he cocked his head to one side and squinted at Bart through that one bull's-eye. "I am Mr. Smartley, consulting engineer for the western district," and he announced the fact as if he fully expected Bart to kneel at the mention of the name.

After Bart had acknowledged the introduction and pulled up another chair, the two men sat down and Bart introduced me.

I can't say that I had any ambition to make the gentleman's acquaintance. Knowing that the two men would probably want to talk over official matters, I excused myself, and, taking my props, started out to see if Miss Fowler didn't think it was a beautiful afternoon. Just as I was leaving I heard the human show-window say:

"Ah, Mr. Goldsworthy, I am out heah to look ovah the ballasting work, you know. Mr. Ma'tin wished that I should come out, you know, and see that the work was progressing. Mr. Ma'tin's very particular about track-work, you know; and I assured him, prior to my leaving San Francisco, that I would see that everything was all right out this way."

He talked as if he had a pound of waste in his maw. I made bets with myself that every time that fellow got real mad he swore like a boomer switchman. I can hear him standing up straight and angrily nibbling the end of his walking-stick and muttering, "Oh, crowbars!" or some other vulgar word.

I never could like that hog-head Rigley from the second district. He doesn't know enough about running an engine to turn one on a "X." He's as homely as a mud-house after a hard rain, and if he don't use cylinder oil as a hair tonic I'll swallow half a dozen car-seals, and I don't claim to be a human ostrich.

He certainly robbed the farm of a good plow-pilot when he went railroading, and I can't see what any woman could find to admire about him. He's so tight, he has to use a cold chisel on his pocketbook every time he opens it, and he buys a new suit of overalls every other year, whether he needs them or not.

The day he bought his last pair he was looking into the front end of an engine to see what pushed the smoke out the stack, when he slipped and fell. He landed square on his back, got up, and was all right until he looked down and discovered he had ripped his new overalls, which cost him six bits over at the Honorable Charles Flynn's emporium.

Immediately he got so sick that he had to go to the hospital. He was just about over the shock and ready to leave the nursery, when he got to figuring how much money he had lost by being off for two weeks, and when he had the figures where he could see them he suffered a relapse.

When I came into the big ward and found him sitting beside Miss Fowler, smiling and showing how crooked his face really was, I didn't say "Oh, crowbars!" I guess it's nobody's business what I said; but any fellow who will thrust his acquaintance on an innocent nurse-girl ought to have his face punched. I sure would have wanted to do the job if it hadn't been that, watching them, I didn't notice that some fellow had left a chair standing on the main line, and my bad-order peg collided with it.

That bump hurt so bad I could feel it in my teeth, and before I knew it I'd yelled right out in meeting, "Hang that chair!" which is a Hungalusian word a fellow can't translate into polite English.

Miss Fowler rushed over and helped me to a chair, and said more by keeping her mouth shut than most women could by talking all day. But Rigley—well, he came over, bringing that homely mug of his along, and asked:

"Did it hurt much?"

"No," I replied. "Hurt? Why, that's part of the treatment for broken legs. I do that three times a day, after each meal; it tickles like Old Harry, but it's mighty good for the digestion."

I guess that woke him up to the fact that there were red lights hanging out for him around my station, and he went on out to the veranda and left Miss Fowler to tell me how sorry she was that I had stubbed my toe; and as I didn't want her to be troubling

her mind about me, I let on as if it did not hurt, and we went to talking about the weather and sand and things, and an hour later I was feeling so good that I would have been willing to kick the stuffings out of every piece of furniture in the nursery if Miss Fowler had asked me to.

When Miss Fowler finally had to go to the private ward to give a patient his chocolate candy, I put my one good wheel into action and headed for the place where I had left Bart talking to the big "what-is-it."

That fellow was the real human phonograph—yes, and then some. He was a pianola, a moving-picture show, and a steam-caliope, all in one. It seemed like his safety-valve had stuck, and he couldn't quit popping off.

I thought he would talk himself to death before he got away. He told Bart all the inside plans of "our road," and gave him a personal history of every official, from Aki Angazawaza, the Jap janitor, to the president of the road. To hear him tell it, he was the confidant and chief adviser of them all; and as for old man Martin—well, it seemed that, after all, Martin was only a feeble-minded old maid, and that if it had not been for Smartley he wouldn't have been able to hold his job a minute.

"Ah, yes, Mr. Goldsworthy," he said to Bart, after I came up, "I am very close to Mr. Martin, you know. Dine at his home quite often—in fact, rawther one of the family, you know. His daughter, Lois, and I are rawther old chums, you know. Which reminds me that Lois insisted that I give you her greetings and express her wish that you are doing well in your new—er—job." And it kept rambling about that way until I began to look for the lever to shut it off."

Finally he got to the end of the record. At least, he began to slow up a bit. I think he must have caught sight of Bart's face; it looked like the off-side of a cyclone cloud just before it starts in to make an omelet of the village church and the town hall, hang the fish-pond on the picket fence, and put the garret two stories below the basement."

"Quite an enjoyable talker," I said to Bart, after the eye-glass got out of hearing. "What is he, Bart, missionary or insurance man?"

"That," said Bart, talking more to himself than to me, "that must be the other man in the case." And then he told me he would be in town for a few days, and would see me again before he went out on the next inspection trip. As he walked away, I

thought there was a sort of droop to his big shoulders.

Just the same, I sized up the situation, and, just taking a chance on form, I bet myself four million dollars' worth of pennies that if the man with the one eye-glass was really the other man in the running, Bart would beat him to the station, have his train put away, be washed up and ready for supper before the other fellow whistled for the high switch.

It looked to me like a mogul racing with a steam shovel. I says to myself: "Miss Martin, if it's between those two men, just give me one guess and I'll tell you what your other name will be after the matrimonial orders have been signed up."

Then I went back into the big ward to see if Miss Fowler had changed her mind about it being a beautiful afternoon.

CHAPTER V.

I Make Another Wager.

WHEN I finally got my discharge from the hospital, being unable to go back to work at once, I put in most of my time as chief cook and bottlewasher over at the adobe. Between that and endeavoring to see that some fellow didn't hang around the hospital too long, I was fairly busy.

Bart spent more time in the terminal after the ballasting had been completed, and as he had insisted on making our housekeeping experiment a permanent arrangement, we were together a great deal. In fact, almost every evening that I wasn't reporting to Miss Fowler he and I sat out in front of the adobe and discussed the policy of the road. If some of the officials could have attended our little meetings they would have received a great deal of valuable information on how to operate a transcontinental trunk line.

It was a good thing that there was no paint on the adobe, for there were times when Bart came home from the office working steam through the stack and so all-fired mad that he could have bitten the head off a ten-penny nail.

He'd sputter and blow until he reminded me of an engine on a frosty morning, when you can hardly see the head end on account of the steam. He'd bring home a cloud of indigo language that would hide all of his six feet of anatomy. Two hours afterward I would be able to glean, from choice particles of language, that he had received a letter from Mr. Ellington Wallerheit Smart-

ley, who, besides wearing a walking-stick and a monocle, drew a salary for being advisory engineer for the western lines.

According to Bart Goldie, Smartley didn't know a knot-hole from a gasket, or a crow-bar from a hat-pin. Bart said that if Smartley worked twenty-four hours a day for a full year, including holidays, and was paid for just what he earned, he wouldn't have enough money on pay-day to buy a gingham apron for a lady-ant.

Whether that was true or not, it did seem reasonable that a fellow in San Francisco could not see the conditions in Winslow, a thousand miles away, as well as the man right on the job, especially so when the fellow doing the long-distance seeing only had a half-pair of eye-glasses.

I know just how I feel when some newly-promoted clerk sends me a two-page exhibit of large words, telling me why I should be able to switch every car in Ash Fork yards in thirty minutes, when, if he had to do it himself, he would have a lifetime job.

I've come home more than once feeling as if I wanted to knock the cobwebs off the ceiling with the furniture, and I guess Goldie felt the same way.

Far be it from me to give my approval to insubordination, but if Bart had told that fellow in San Francisco to go fishing for salt in the sea, I would have said "Amen."

But Bart didn't come home wanting to scratch the varnish and kick down the door on all occasions. It seems as if he got other letters than those which came in his railroad mail.

I saw one of them on the table one day, and it was addressed in a hand too light for a man and too heavy for an old maid. In trying to read the post-office stamp on it, I got so close that I caught a whiff of perfume, and I just gave myself three guesses as to who wrote that letter, and then never used two of them.

If the writing and the San Francisco post-mark were not sufficient evidence to convince me that Lois Martin was the writer, some of the fool things Bart said and did after he got that letter cinched my belief.

The night he brought that letter home with him we took our chairs out in front of the adobe, and Bart began to talk of building railroads down the Grand Cañon, double-tracking to Mars, and swinging a suspension bridge between New York and London. That night he would have taken a contract to put in a subway between Los Angeles and Denver.

He told me, positively, that the man who picked out the right-of-way for the third division should have been surveying for a rail fence. He said the third division was just fifty-three miles longer than it really ought to be, not counting several miles wasted in going up and down. He started out by showing me that a straight line is the shortest distance between two points. He went on for an hour about hypotenuses and hypodermics and epileptics, until I began to think that Bart really knew something.

He went on to show that, other things being equal, by adding the wheel-base of the locomotive to the length of the rail, and multiplying the result by the number of toothpicks in a tie, plus the square root of the number on the caboose, gave a sum equal to what a Baldwin hog could pull on a twenty-per cent grade, provided the conductor and the rear shack didn't drag their feet.

This sum, when gently mixed in a bucket of warm water, would leave a residue, which, when divided by the number on the engine, would be the cube root of the price of beans when Mississippi went Republican.

Having explained these elemental truths to me, Bart went on to say that if the track from Supai to Ash Fork was built in a straight line, it would be shorter than it was running around the neighborhood without its parents.

"Now," says Bart, "I propose to suggest to Mr. Martin that we build a cut-off from Supai to Ash Fork, running the track down the left side of Johnson's Cañon—"

He said a few other things, but while I was willing to indulge him, there was a limit. When a man begins to talk about building a railroad down the side of Johnson's Cañon, I pass the book and ask for a new deal. Johnson's Cañon is three hundred feet deep, if it's an inch, and a Rocky Mountain goat would stand more of a chance to walk up Bunker Hill Monument on its horns than it would to climb out of Johnson's Cañon on its feet.

Not only that. Half-way down the cañon, if you are on the left side, the big crack turns sharply to the right for a half-mile and doubles back again, making an imperfect "V." Not only was Bart planning to build a railroad along the wall of this cañon, but he was dreaming of tunneling almost three-quarters of a mile across what would be the top of the "V" in order to avoid the extra mileage out to the sharp point of the "V" and return.

When he went to stringing me with that kind of stuff, I thought it was time to flag him.

"Bart," I said, "that's a fine piece of track you're building. A train would go down it like a sled down a steeple; but what I can't see is how you're going to get back up."

Bart looked at me in amazement. There was an element of pity in his look, too.

"I gave you the figure to prove that the grade would only be four per cent, when I started out," he said, and I detected an element of bitter disappointment in his tone, just as if he realized for the first time that I lacked brains.

"Oh," I replied. "Those figures—yes, I remember. I thought you were trying to beat a differential rate without violating the laws of the Interstate Commerce Commission."

Bart looked at me a moment, and, even in the dusk, I could see that undershot jaw of his set.

"Baldy," he finally remarked, "don't think I'm joking about this matter. I've been all over that cañon up there, and I know it can be done. I can shorten the third division over fifty miles and decrease the grade. Some day we will build that piece of track."

When Bart Goldie said "we will"—well, I thought so well of the proposition that I just bet myself a bushel of twenty-dollar gold pieces against a peck of Gallup coal that "we would."

Of course, after I met Bart Goldie I won a lot of money-making mind bets, but I couldn't cash my tickets at the Harvey House, so just as soon as the bad-order card was taken off my leg, I joined the "first-in first-out" squad, and went back to making out trip slips and signing orders, leaving as much of the work as possible to the brakeman.

A month or so rolled by, and then the orange crop began to move, and I stayed mighty close to my dog-house; for every time you got fifty yards away, the call-boy would run you back.

That fall I hardly had time to register at the hospital between trips, not to mention getting over to the adobe and spending an evening with Bart. A man who follows his caboose when she is making better than six thousand miles a month, is too busy to give much attention to love affairs, especially when they belong to some one else.

For that reason, for several months Bart

Goldie had to meet his battles alone and without the wisdom and guidance which I might have been able to donate, had I been less necessary to the general welfare of the road. Those months slipped by unnoticed, because they brought nothing exceptional except the pay-checks, which, as I didn't have time to spend them, I carried around in my wallet.

There were few minor things to engage one's time. Miss Fowler, being so far from home and so much alone in the world, really became a source of concern, and I just had to take time to drop by the hospital semi-occasionally and see that she was getting along all right.

One evening, when I went into the hospital office she came in from the general ward, her poor little eyes swollen and red, her face streaked with tears, and, although she tried to hide the handkerchief and greeted me with a smile, I knew that she was being mistreated, and, durn me, if I didn't make a vow to whip the man, just as soon as I found out who he was.

We went out on the shady side of the porch and talked a while, she insisting all the time that everything was right, and me knowing that she was bravely trying to hide something. Finally, I just couldn't stand it any longer.

"See here, Miss Fowler," I began, determined to have the truth at any cost, "we've been friends for a long time, and I want you to feel that you can trust me. Now, you're in trouble—"

"What makes you think so?" she asked, trying to dodge the point.

"Well, I'm old enough to know the symptoms. Things have been going wrong either here or at home, and I—er—well, if there is anything I can do, just ask me."

With that, she pulls out the handkerchief from that little pocket in her uniform and presses it to her eyes again, and didn't answer, so I continued:

"I'm old enough to know you don't cry that way for nothing—"

She just threw back her head and laughed like a flock of bells on New Year's night.

"I'm not crying. What makes you think I am?"

"Can't I see? Didn't I notice how red your eyes were when you came out of the ward? I guess I know tears when I see them."

"No, no, Mr. Murray," she says. "You don't know a real tear when you see it. About an hour ago, in the medicine closet, I

knocked a bottle of ammonia off the shelf. It broke and some of it splashed in my face, and I got a real good whiff of it. Did you ever take a real good, long smell of an ammonia bottle?"

I never had; but, just the same, I was so sorry about the accident and so concerned about her eyes, that I laid out Red-ball 33, just forty-five minutes to tell her how sorry I was. "As the call-boy had given me a good hour-and-a-half call, I couldn't kick when the old man hauled me up and gave me ten brownies.

It just convinced me that a hospital is a mighty dangerous place for a young woman, and Miss Fowler being so far from her relatives, I made up my mind to look after her a little, and looking after a young woman that way, and making every trip your caboose makes in the orange season keeps a fellow who isn't a twin awful busy. I just had to let poor old Bart do the best he could.

First thing I knew, spring had followed winter, and the A. and P. had lost the big transcontinental mail contract. The government gave three roads a chance to make a trial trip for speed, with the understanding that the best time won the contract.

The division had advance notice of the mail special, and everything was lined up for a clear track. The special came out of Albuquerque right on the dot, topped the Big Divide, and came rolling down the second division like a winning thoroughbred. It left Pinto right on the dot, and showed up at Huk's tank, just eleven miles away, six hours late. Old man Brumble, with Skinny McCearly on the head end, left Pinto with plenty of time to make Huk's tank and clear by a month of Sundays, but when Skinny threw the air into them to slow down for the east switch, a quick triple valve, about two-thirds the way back on the eight-car train of empties, got in its work.

When the mail train got down there, it looked as if they had pulled up on the team track in a junk yard. There were draw-bars and end-sills all over the country. That train only broke in seven pieces. Several of the cars were derailed, and with everybody working as if they were trying to keep out of jail, it took six hours to get Brumble's train in the clear and the scrap-iron off the right-of-way.

Everybody felt real cheerful about that little stop. Over at the terminal, the old man was doing double flip-flops, skating about the office on his ear, and juggling the waste-basket on his feet.

He ordered every train on the third division to stop right where it happened to be, and get into the clear and stay there. The order caught me over at Crookton, one hundred and twenty miles from the terminal, and I went right into the clear and stayed there. By the time that mail train came by, I had proved up on my claim, had the ground platted into town lots, and was just starting to put in the paving.

When I finally got into the terminal, I found out just how it was. When the mail train lost six hours over at Huk's tank, the old man cleared the road, ordered the 422, a big prairie, called "Smoke" Kelley to run her out of his turn, and none too gently informed "Smoke" that if he didn't pick up three hours of that time over the third division, he could quit when he got to Seligman.

That was just like a train-load of cash fares for "Smoke." When he went by Falstratt, he had picked up an hour; when he shot by Supai tank, he had picked up fifty-four minutes more; then he hit that piece of track down Supai Mountain, where a snake would break its back in seventeen pieces if it went faster than a walk.

Just to add to his troubles, there were slow orders out at two places. Down on the Fairbell curve he hit a piece of soft track, and, by throwing her into the big hole, barely got enough air to keep the cars on the track, the pony truck of the engine dropping down to the ties.

That hour and fifty-four minutes which he had picked up, and another hour, too, went by before "Smoke" brought them on down to the Forks. Of course, he burned the rails from there over to the end of the division, but he couldn't make up very much, and the mail train went off the third division, as it had come on—just six hours late.

They say that the A. and P. lost the mail contract by seven hours.

You know how it is when something happens like that. The general manager writes a sassy letter to the general superintendent, and asks "why?" The general superintendent finds some new words in the dictionary, repeats some old ones, and says, "Please note and answer immediately," and passes it on to the division superintendent.

When this worthy gets over his chill, he presents it with his compliments to the train-master, who slings a little ink on a nice, clean sheet of paper, and thrusts it on the chief despatcher, who turns down a corner and scratches "Please explain" on it for the benefit of the operator. Then it goes

back up the line, and comes down on another lead until the division master mechanic has a chance to see it.

The roundhouse foreman then passes it to the night foreman, who interviews a machinist, who says it was the fault of the night watchman who is no longer in the service, and the four hundred and eighty dollars' worth of paper and seven bottles of ink goes back to the general manager, who, by that time, being unable to tell whether it is a tracer for a bunch of hair-pins or a requisition for postage stamps, orders it filed in the third story of the basement.

That's the way it usually goes—but not in this case. The papers came into the hands of one Bartholomew E. Goldsworthy. First out in the file was a letter from Ellington Wallerheit Smartley, which, besides insinuating that some people didn't know the first principles of track building, ordered the roadmaster of the third division to report to him in San Francisco as soon as possible, if not sooner.

It seems that Superintendent Arnold had received the same order from General

(To be concluded.)

COST HIM A BREAKFAST.

IT cost Jack Inglis, of the San Francisco office of the Union Pacific, just forty cents to become a sanitary inspector recently.

Every one around the Flood Building knows of Inglis's custom of reaching his office before the sun had risen. Not very long ago as he passed through the hallway, at about 4.30 A.M., he noticed three packages of lunch on one of the window-sills.

The packages were varied, and after noticing them for a week he finally decided that it would not be long before the rats would be attracted. He figured that the janitor had not noticed them, so threw the entire bunch into the center of the court where the janitor couldn't fail to see them.

He had just settled himself in a chair in the Union Pacific offices when he was interrupted by a loud knocking at the rear door. He opened the

Manager Martin, for his private car was coupled onto the same passenger train which carried Bart out of town.

I happened to be over at the depot that morning. Just before Bart got aboard, he showed me the file of papers, with Smartley's letter on top, and said:

"I'm going into headquarters, not because that fellow orders me in, but to start something. I'm going to show these people where they can save seven hours on this division. I'm going to convince this Smartley, before I get through, that he don't know how to build a street-car line, and when I come back I'll either have no job, or I'll be fixed so that fellow can't come in with an insult like this every time he feels like it. Somebody's going to find a lot of trouble in his back yard."

After the train had pulled out and I had time to think it over, I just entered a little note in my train-book which read:

"One thousand to one offered that Bart Goldie makes Smartley look like a hat-check full of holes.

"No takers."

door and was met by a man of very large proportions.

"Good morning. What can I do for you?"

"Say, are you the guy wot threw my breakfast away?"

"Threw your breakfast away? Who are you?"

"I'm de night watchman."

"Why, I threw a couple of packages away that have been out on the window-sill for a week."

"For a week, say, wotcher givin' me? It was my breakfast, and 'ud only been there about five minutes. Youse is de only guy wot gets around here dis early, so I figured it 'must 'a' been you wot done it."

"So I had to take him across the street and pay forty cents for his breakfast," said Inglis, when he told the story.—*San Francisco Call.*

TELEPHONES FOR TRAINS.

THE freight-trains of the Lehigh Valley Railroad are being equipped with portable telephone outfits. In case of a breakdown between stations it is often difficult to communicate with the despatcher, and many delays are due to this.

It is expected that the telephones will do away with such delays, as they may be connected with telephone wires at any point along the track by means of an extension pole which is hooked over

the line. The telephones will also be used on passenger-trains, to permit passengers to communicate with friends while a train stops at a station.

Furthermore, it will be possible to reach a passenger by phone, provided one is aware of the train on which he is traveling, by calling up the next station ahead and having a page call the passenger to the train telephone as soon as the train enters the station.—*Scientific American.*

HELP FOR MEN WHO HELP THEMSELVES—NUMBER 35.

PASSENGER-CAR CONSTRUCTION.

BY JOHN WALTERS.

Ross Winans's Eight-Wheeled, Two-Truck Columbus, Designed for the Baltimore and Ohio, and How It Gradually Developed into the Model of Later-Day American Car-Builders.



WHEN the first mile of the Baltimore and Ohio Railroad was graded west of Mount Clare, the board of directors, unable longer to restrain their eager desire

to revel in the rapture of railroad travel, had the scrap-iron rails laid, and, hastily constructing a car which looked very much like a farmer's market-wagon, hitched one horse to it, and prepared to open the road. President P. E. Thomas, William Patterson, Alexander Brown, and other directors, and, of course, Charles Carroll, of Carrollton, who, as his fellow citizens perpetually reminded him, signed the Declaration of Independence, piled in, and away they went.

Up and down that mile of track those distinguished citizens rode, as happy as boys with a new sled. After they had satiated their appetite for railroad travel, the no less eager common folk were permitted to step up and gratify their curiosity at the moderate price of twelve and a half cents a head.

The Baltimore and Ohio has never since equaled the record made that day in the volume of traffic moved in proportion to its facilities, for its entire equipment was constantly loaded to three hundred and fifty per cent of its capacity in both directions.

The taste for travel thus engendered lasted long and spread far, as may be judged by the

following excerpt from the *Baltimore Gazette* of July 29, 1840:

Notwithstanding the great heat of the weather for three weeks past, the amount of travel on the railroad has not diminished, the average receipts being much above a thousand dollars a week. In the hottest time of the hottest days the quick motion of the cars causes a current of air, which renders a ride at all times agreeable. In many instances strangers passing through Baltimore, or visiting it, postpone their departure for a day, and sometimes longer, to enjoy the pleasure of an additional ride on the railroad. We only repeat the general sentiment when we say it is the most delightful of all kinds of traveling.

So keen was the public interest in the railroad and everything pertaining to it that, in 1832 and 1833, the arrivals and departures of freight-cars, or "waggons," as they were then called in imitation of the English custom, were chronicled as the movements of ships are now set forth in the marine department of a daily paper.

Thus it was recorded in the Baltimore papers that, on February 18, 1832, there arrived on the Baltimore and Ohio Railroad, "68 waggons containing 872 barrels of flour, 2 tons of soapstone, 40 bundles of leather, 38 tons of granite, and 42 tons of wood. Departed: 59 waggons with lumber, plaster, bricks, groceries, merchandise, coal, etc."

Having aroused a slumbering appetite that could not be controlled, the board of directors was in desperate straits for means to gratify it. The great question which confronted the directors after that first ride was: What is a car?

They tried again, and this time produced a rude clapboard cabin set on four flanged wheels, without springs, holding ten passengers, and with a perch for the driver outside. This contraption shocked the esthetic sensibilities of Richard Imlay, the famous coach and carriage builder, of Baltimore, who offered to provide something better. The board was only too glad to have him do so.

Imlay's Masterpieces.

Imlay's first idea of a railroad car, naturally enough, was simply an overgrown stage-coach with leathern braces, C springs, and a capacity of nine passengers. For some time these were all the fashion. Imlay felt so proud of his handiwork that he nearly wiped out his profits in putting on extra flourishes of gaudy paint.

Each new triumph of his skill was set out in Monument Square for the admiration of all beholders for several days before being turned over to the railroad company. One of Imlay's masterpieces, named the "Ohio," built in August, 1830, was described by the *Baltimore American* as being very elegant. It had seats for twelve inside and a seat at each end for six, including the driver, while on top was a double sofa, placed lengthwise, with room for twelve more. A wire netting kept the passengers from falling off, and an awning protected them from the sun.

Such handsome vehicles, of course, only whetted the public appetite for railroad travel, and the time inevitably came when something more capacious was demanded. Ross Winans, the great locomotive builder, who never failed to step into the breach when the Baltimore and Ohio needed an idea, thereupon built the first eight-wheeled passenger-car, which he named the "Columbus."

It was simply a large box with benches inside and on top, reached by a ladder at the corner. When the design was first submitted to the board of directors they argued long and earnestly whether the new car should have an aisle down the center, or a narrow ledge along the outside on which the conductor could walk. The advocates of the center aisle won the day, and the rough draft of the American type of passenger-car was given to the world.

Its essential features were all there, and it seems now as if it should have been a simple matter to develop the details as they were required, but it was not. On the contrary, the passenger-car reached its present state only after a long struggle.

As in the case of every other feature of the railroad, the volunteers were prolific and persistent in their proffers of solutions for all problems pertaining to cars. Louis Wernwag, an architect, of Harper's Ferry, proudly exhibited at the office of the *Charleston (Virginia) Free Press*, in August, 1832, a model of his—"self-regulating, or self-directing railroad-car." Wernwag's idea was to produce a car that could run around curves.

To accomplish this end he used six wheels, the center pair being the regulators. From this center-axle hounds, or guiding poles, led to the other axles to guide them around the curves. The axles of the main wheels were jointed in the center so that the outside wheel, in going around curves, could travel the faster. The enthusiastic editor of the *Free Press* declared:

"We verily believe a car might be constructed on this plan to run around a common-sized haystack."

But haystacks not-being a usual feature of railroad equipment, Wernwag's car did not make a hit, though six-wheeled cars quite as extraordinary were actually operated on the Baltimore and Susquehanna in 1844. These six-wheeled cars had wooden springs, consisting of white-ash planks 2 by 6 inches and 16 feet long. It was the proud boast of the builders that these cars carried a much heavier live load in proportion to their dead weight than the cars, or section-boats, which alternately floated on the canals or trundled over the State railroads of Pennsylvania.

The Only Armored Cars.

The Baltimore and Susquehanna achieved the additional distinction of running the only armored cars ever used in regular service in America. The armor consisted of a sheathing of one-inch oak boards beneath the floor to prevent passengers from being impaled on chance "snakeheads," or sirap-rails that took a notion to curl up under the weight of passing trains.

Speaking of springs recalls the fact that the original car-builders thought such refinements of luxury quite superfluous. Herein, however, they differed from the passengers. The patrons of the West Chester Railroad, a branch of the Philadelphia and Columbia,

complained that the constant tremor of the springless cars made their heads itch, while others maintained that frequent indulgence in travel would surely addle the brains of travelers.

Innovations in Springs.

Air-springs were extensively used in the early fifties. These were simply cylinders without a bottom in which a piston worked compressing the air in the cylinder, but the air invariably leaked out, leaving the spring useless. Then, in 1857, some unknown genius improved on the air-spring by substituting a diaphragm for the piston and pouring some sugar-house molasses into the cylinder as a seal. Air was then pumped into the cylinder with a hand-pump just as bicycle-tires were inflated at a later day, and the result gave the car a motion warranted to be very gentle.

After the air-spring, rubber was very extensively used in the fifties and sixties, and even continued in use until well along in the eighties, although its unsuitability was recognized almost at the outset by the more practical part of the railroad world.

So difficult was it for the people of early days to realize that vehicles of any description needed or could with propriety possess more than four wheels, that four-wheeled cars continued in use for years after Winans had shown how to build them with eight wheels.

Each road in its turn timidly experimented with the eight-wheeled cars as with an original discovery. Then for a time trains were made up of both four-wheeled and eight-wheeled cars, but as the old four-wheelers wore out they were replaced by the more modern eight-wheeler until the four-wheeled type exists nowadays only in the cabooses of some Eastern roads.

Close Quarters for Passengers.

The first passenger-cars on the West Chester road were four-wheeled, and had five seats inside and one at each end outside, into each of which five passengers were supposed to squeeze themselves. One horse furnished the motive power. When the Philadelphia and Columbia was opened in 1834 it had four-wheeled cars, seating sixteen on longitudinal benches like the street-car of to-day.

The Saratoga and Schenectady Railroad, open for traffic in July, 1832, had a six-wheeled locomotive, the "Saratoga," which

hauled a train of eight "carriages," with a total capacity of one hundred and sixty passengers, and three "baggage-wagons," over the entire twenty-two miles of the line in an hour and a half. According to the *Saratoga Sentinel* of July 24, 1833, "the spectacle is of a truly imposing character, and will for a long time prove a novelty of much interest to our inhabitants."

The first passenger-cars on the Allegheny Portage Railroad were primitive affairs, with four wheels, and seating twenty-five passengers, and were designed by Lot Dixon, the assistant engineer of the road. They made the trip of thirty-seven miles, including ten inclined planes, in five hours. Charles Dickens, the great English novelist, who made a trip over the road, was enthusiastic over the experience.

Real luxury in travel was first provided by the Philadelphia, Germantown and Norristown, which made an eight-wheeled car by joining two stage-coach bodies and cutting a center-aisle to connect them. If accounts are to be credited, these palaces had a barroom at one end and a ladies' saloon at the other, and were models of elegance and comfort.

Early Railroad Freaks.

One of the curiosities of those early days was the Gothic pleasure car on the Erie and Kalamazoo, the pioneer railroad of Ohio, opened from Toledo to Adrian, Michigan, thirty-three miles, in September, 1836. The Gothic car had a sort of mansard roof built crosswise of the track. There were three compartments, seating eight passengers each, two being on the ground floor, while the third was in the attic under the mansard roof in the center of the car. The motive power at first was supplied by one horse. The fare for the thirty-three miles was \$1.50, with a free allowance of fifty pounds of baggage, which was raised in 1837 to \$2.25.

Of all the freaks produced in the evolution of the car, however, the barrel-car, used on the South Carolina Railroad, originally the Charleston and Hamburg, in 1840, deserves the palm. It was appropriately named, for it was modeled after a barrel, 30 feet long, 9 feet in diameter at the middle, and 8 feet at the ends. The staves, $1\frac{1}{4}$ inches thick and 6 inches wide, were tongued and grooved and held in place by six iron hoops, 2 inches wide and $\frac{1}{2}$ -inch thick. There were twenty windows on a side, and a little portico $2\frac{1}{2}$ feet wide at each end.

Louis Wernwag was not the only man who

worried about the wheel on the outside of the curve being obliged to travel farther than the wheel on the inside. From his time to the present day inventors have expended a good deal of gray matter to overcome this difficulty, and many and curious are the devices they have produced for that purpose.

Weak Axles Cause Accidents.

On the Little Schuylkill, in Pennsylvania, the first cars, which had stage-coach bodies, had wheels 3 feet in diameter, and were loose on the axle on one side so they could get around the curves without trouble. Another invention consisted of one axle inside another. Each carried a wheel on one end and revolved independently of the other. A lug on one axle and a groove in the other were supposed to keep the wheels from spreading.

The real fault of the early axle, its weakness, was suffered to go unheeded for a long period, with the result that more wrecks resulted from broken axles than from any other single cause. President Franklin Pierce's only surviving child, Benjamin, aged thirteen, was killed in a wreck caused by a broken axle two months before his father's inauguration. Mr. and Mrs. Pierce and their son were going from Andover to Lawrence on the Boston and Maine on January 6, 1853, when their car was dashed against the rocky wall of a cut by the breaking of an axle, and little Ben, who had been entertaining his parents with his merry chatter, was instantly killed. His parents escaped injury, but his mother never recovered from the shock of her boy's death.

No other accident was so much dreaded for years as a broken axle. Instead, however, of adopting the obvious remedy of making the axle stronger, the railroads at first only looked for some means of averting the consequences when they broke. For a time a "safety beam," invented by Joseph S. Kite, superintendent of the Philadelphia, Germantown and Norristown in 1838, was used on a number of roads. The safety beam was simply a beam lengthwise of the truck on each side to hold up the broken ends of the axles in case of failure.

Types That Soon Departed.

Wheels, too, often failed, with disastrous consequences. Nothing was done about it, though, until October 11, 1851, when the practise of tapping the wheels with a hammer

to ascertain from the sound whether they were cracked or not, was introduced on the New Haven road.

In 1840 a coach was built at a cost of \$2,000 for the Tioga Railroad that achieved the remarkable record of forty-three years of continuous service, in which time it traveled 1,100,000 miles. It was exhibited at the Chicago Railway Exposition in 1883 before being honorably retired. It was 36 feet long, 8 feet 4 inches wide, and 6 feet 4 inches high.

The only ventilator was a ten-inch flue in the center of the car. The windows, which were very small, could not be raised, but the panels between the windows opened. The wheels were outside the bearings. Light was furnished at night by a candle at each end.

In 1845 the editor of the *American Railroad Journal* complimented the management of the Harlem Railroad on its enterprise in providing "several superior new cars so high that one can stand erect when he cannot find a seat."

The First Compartment-Car.

In 1853 Eaton & Gilbert, of Troy, built some "saloon cars" for the Hudson River Railroad which were regarded as "most magnificent." They were a foot wider than any coaches then in use. There was an aisle at one side, opening off of which were four saloons seating eight each and one seating four. In the larger saloons were a sofa, five chairs, a center-table, and a mirror. Landscapes were painted on the panels regardless of expense.

An extra fare was charged on this, the first example of the compartment-car, but one need not have minded this extra seat-fare, for the rate then between New York and Albany was only \$1.50. The Hudson River Railroad in those days ran the fastest regular train in the country, making an average of thirty-six miles an hour, including stops.

The fastest long-distance run of that period was made by the "Telegraph Express," on June 9, 1852, which covered the 144 miles from the Chambers Street Station in New York to Albany in 2 hours and 52 minutes, and to Buffalo, 472 miles, in 14 hours and 25 minutes, though the actual running time was only 11 hours and 29 minutes. The schedule time from New York to Chicago then was 48 hours. The slowest train was run by the Sangamon and Morgan Railroad in Illinois, which consumed 6 hours in running 54 miles.

While the Hudson River road was indulging

in the luxury of saloon-cars, the Michigan Central, in 1853, built twenty-two of the finest ordinary coaches that had been seen up to that time. They were 60 feet long, had six-wheeled trucks, and seated seventy-two passengers. The ice-water tank made its debut in those new cars, passengers up to that time having been served by a water-boy who carried through the aisle a painted tin can resembling a teakettle, from which he poured water to order. Three years later the Erie built some coaches that were 60 feet long, 10 feet 9 inches wide, and 7 feet high, with twenty windows on a side, and seated 74 passengers. The seats were upholstered with plush at \$5 a yard.

Illumination and Heat.

The first car-stove was the invention of Dr. McWilliams, of Washington, first used on the Baltimore and Washington Railroad in 1836. The first light was provided by candles, one at each end of the car. Many attempts were made to provide a better light, but as late as 1867 the Camden and Amboy was still using candles, though numerous scars on the inner walls showed where some patent lamp had been weighed in the balance and found wanting.

The Camden and Amboy tried illuminating gas pumped into tanks under pressure, in 1859, while the New Haven and the Boston and Lowell attempted to use gas in tanks at the ordinary pressure in the mains, forced out by a clockwork arrangement, but both attempts were failures. Other roads tried illuminating gas with no better success.

As for seats, the first were mere planks, though Inlay provided cushions for his masterpieces. By 1846 some of the more enterprising roads had progressed to haircloth cushions. Any one who has ever tried to hold his seat on an old-fashioned, broad, haircloth sofa, safely anchored in a parlor, can imagine what a time of it the passengers of 1846 had in trying to stick to the narrow, angular car-seats lubricated with haircloth, while the clumsy car with poor apologies for springs and lots of slack throughout the train bumped and jolted over the rough track, innocent of easement curves.

If the passenger attempted to recline at ease he would find himself on the dirty floor before he realized that he was going, or if he attempted to catch himself he did so at the imminent risk of a broken back. The only thing he could do was to brace himself with both hands and feet and pray for deliverance.

While the haircloth car-cushion was at the height of its ravages, Davenport & Bridges began building cars nine and a half feet wide, seating seventy passengers in separate arm-chairs upholstered in red plush, but nowhere were there cars enough to handle the traffic. Trains were overcrowded, filthy, and uncomfortable.

The steamboats of those days were bad enough, but they were so much better than the cars that every one traveled by water whenever there was any choice of routes.

The reversible-back seat made its appearance in 1852. Under date of January 1, 1852, F. M. Ray had advertised an offer of \$3,000 in prizes to inventors "to promote safety and comfort in railroad travel." Of this sum \$300 was to go to the inventor of the best "sleeping, or night seat," to be exhibited at the American Institute Fair.

Perhaps the patenting of the first reclining-chair for cars by John T. Hammit, of Philadelphia, in the following year, may have been brought about by this prize offer. It was not called a reclining-chair, however, but a "night seat." In December, 1854, the editor of the *American Railroad Journal* made a night journey over the Philadelphia, Wilmington and Baltimore in one of these "luxurious" easy chairs. He waxed very enthusiastic over them and pronounced them "the perfection of railroad sleeping arrangements."

This would seem to indicate that the sleeping-car had not then been thought of; but as a matter of fact, the first sleeping-car in the world, the "Chambersburg," was first run on the Cumberland Valley Railroad between Chambersburg and Harrisburg, in the winter of 1837-1838, and for ten years thereafter.

It was such a success that a second car, the "Carlisle," was immediately placed on the opposite run.

There Was No Bedding.

Yet neither car would have come up to modern ideas on a sleeper. There were twelve berths in three tiers, but no bedding. On October 31, 1838, a sleeping-car was open for public inspection in Baltimore, which was put in service that night on the run to Philadelphia, a trip which required six hours.

In January, 1859, Nathan Thompson, of Brooklyn, exhibited at the St. Nicholas Hotel, in New York, a full-sized model sleeping-car 48 feet long, containing eight compartments 6 feet long, with an aisle running the length of the car on either side. The seats ran lengthwise of the compartment, back to back,

and each was expected to accommodate four persons. Attached to the sides of the car were two seats which could be let down out of the way when not in use.

At night the back of the seat made one berth, and the seat made another. A third was made under the seat, and an extra mattress could be laid on the floor for the fourth sleeper, while above the upper berth was a rack for small children. It was pointed out that "the fastidious traveler can, if he choose, take along with him a pillow, or other bed-clothing"; but somehow this privilege, even with the addition of the baby-rack, did not seem to appeal to the traveling public, though the proud inventor announced that he was to provide one of his cars for the Emperor of Russia.

A little more attractive to railroad managements was the Central Transportation Company, of Philadelphia, G. W. Childs being its president. This company, having bought the patents of Woodruff, Knight, and Meyers for seats and couches, was able to make arrangements, in 1863, to run sleeping-cars on the Pennsylvania, the Northern Central, the Bellefontaine Route, the Central Railroad of New Jersey, and a few other roads, but it did not meet the requirements of the traveling public, and its career was brief.

In 1853 the first vestibule, the invention of Waterbury & Atwood, was introduced on the Naugatuck Railroad in Connecticut, and was given a year's trial before the management could decide that it would not do. The first vestibule, which was not called by that name, was a flimsy affair of wood and canvas, shaped like the original, narrow Pullman vestibule, and was but an incidental feature of one of the numerous plans for ventilating trains by taking air from about the back of the tender and conveying it through chutes to the cars.

Gradually cars were provided with more or less comfortable seats and suitable springs, which did much to mitigate the horrors of travel. By the end of 1863 the clearstory began to be introduced, which afforded better means of ventilation than had been available

up to that time. The wooden cars were very frail, and in collisions were almost sure to telescope, with frightful loss of life.

An attempt was made to introduce the La Mothe iron car, the first metal passenger-coach, seating sixty passengers, and guaranteed to be cheaper, more durable, lighter by two tons, and stronger and safer in collisions than wooden cars; but railroad men would have none of it, although a number of iron passenger-cars were built in 1855 at Hamburg for the Russian government, and the Reading Railroad began using iron coal-cars as early as 1844.

In fact, coaches seemed to be especially designed to facilitate telescoping, for the coupler and buffer were placed below the car-sills so as to offer the least possible resistance. Ezra Miller, a well-educated, prominent citizen of Wisconsin, undertook to remedy this fault. In 1863 he obtained his first patent for the Miller platform, coupler, and buffer, which was hailed as "the greatest life-saving invention of the age."

The Miller platform was placed on a line with the sills, where it would have the greatest power of resistance. Every old-time railroad man will remember the "Miller hook coupler" and its spring buffer, for the inventor lived to see it adopted by every railroad in the United States. It not only made Miller rich, but, by reducing the space between platforms, it enabled people to pass from car to car in a train without risking their lives, and it greatly increased comfort by taking up the slack in trains.

With the adoption of the Miller platform and coupler, and with the safeguards afforded by the Westinghouse air-brake, and the luxuries introduced under the leadership of Pullman, as already described in *THE RAILROAD MAN'S MAGAZINE*, the evolution of the passenger-car was brought up to date. To-day, all the big roads are considering the all-steel car as the future passenger-coach. The Pennsylvania now uses them almost entirely, as does the New York Central, and the New York, New Haven and Hartford is putting them in service as fast as they can be built.





ANDERSON'S FOUR KINGS.

BY S. O. CONLEY.

A Story About the Laws in Lagunitas that Govern Poker and Pugilism.

HIS name was Anderson. He stood six feet two in his stocking-feet. His hair was as red as a sunset, his face was freckled, and his hands and arms betokened the strength that comes of an out-of-door life. Big in bone and brawn, he was easily the master of any situation that came up for settlement in the little camp at Lagunitas.

As for Lagunitas, it was a mining-camp that nestled in the foothills of Calaveras County, California. Not being on the map, it was not dignified in the official archives at Washington, D. C., as being worthy of the visit of the census-taker. However, it had a population of exactly 1,747—and they were all Americans born. Lagunitas boasted of this fact.

One thousand of the population were of the masculine gender, and, in that goodly number, Anderson was the king.

He was king because he could settle any dispute; he was king because he could have his way in practically any old thing, and he was king because there was not a man in the place who could land on Anderson's solar plexus.

Many had trained and tried, but the re-

sult was always the same. When the count was given they failed to rise. Though he was forty years old, Anderson never failed to "come back" whenever he had to fight.

Now, it so happened that Anderson never "fell" for the fair sex. Many a young woman of the camp had admired him for his "shape" and his pugilistic prowess, and had let her feelings become known to him in the coyest of coy glances, but to all of them Anderson simply said, "Beat it"—not in so many words, but with the look of disgust and disdain for which he was noted and which meant more than words.

Anderson had a run-in with Tim Logan, and all because the two men could not agree which should deal in a very exciting poker-game. It was a game with a twenty-five-dollar ante and no limit as to time. You could "sit in"—provided you had money—and once "in" you could play for days, perhaps.

This particular game had run for nearly two days and nights. An agreement was made that a recess of thirty minutes would be taken in order that the inner man might be replenished with a goodly supply of fried ham sandwiches and beer. When the recess was called, Logan had been winning and

Anderson losing, and the other three players had whipsawed between good luck and bad luck like so many ping-pong balls.

At length, when the game was resumed, Anderson went at it with a mind that was ripe for any kind of trouble. After the first round had been dealt and he had lost, he doubled up his fist like a Janney coupler and brought it down on the table with a bang that sent the cards in all directions.

"Boys," he exclaimed, "I'm going to win or lose something here before the night is over. Take my word for it."

"Make a side bet with you that you lose somethin'," remarked Slim Condon.

"What's your limit?" asked Anderson.

"Fifty bones," replied Slim; whereupon Anderson dug down into his overalls and produced the amount.

"By heck, boys, it's all I've got," he said with some degree of surprise. "If I lose this, I'm broke, and it's the first time I've been so situated in many a day."

Slim produced his fifty and laid it alongside Anderson's on a corner of the table which was conveniently reserved for side bets.

The game went on. One or two hands were dealt. Anderson bluffed a small "jackpot" and raked in seventeen dollars. A smile played over his face, for he thought that his luck had changed. Then the deal was passed to him. He ran out the cards with the agility of long practise, and when the final one of his five had fallen in front of him, he picked them up gingerly and ran his eye over the corners.

To his astonishment, he discovered that he had dealt himself four kings.

Just for the merest phase of an instant a lump came into his throat. He was about to cry out with joy. It was only a flash, however, and he regained his composure before the other four players had examined their hands.

Anderson picked up the pack and called, "Cards."

One of the players chucked his hand in the discard and passed. Another called for three cards, and Anderson knew that he was drawing to a pair. The third hesitated a long time, and then called for one card, and so Anderson naturally surmised that he wanted to fill out a flush. Then he looked at Logan, and Logan simply said, "Two."

"He's got three of a kind and is trying to draw the fourth," said Anderson to himself. "But this time I've got him."

He picked up his own hand and scanned

the edges again. He would call for one card for himself. He knew that he could not give himself any advantage by so doing, but it might lead the other players to think that he was drawing to a flush. If he stood pat, they would surmise that he had a big hand and, perhaps, stay out.

So, when he said, "The dealer takes one," two of the players went into the discard. This left Anderson, Logan, and a third man in the game. It was up to the third man to open the betting.

"Guess it's worth a ten," said this individual, as he threw a shining ten-dollar piece to the center of the table.

"Raise you ten," said Logan, throwing in a twenty.

"And ten more," said Anderson, taking six five-dollar pieces from his pile and placing them with the rest.

Be it known, in Lagunitas chips were never used. For sundry and obvious reasons, it was "cash on the table." That was the inevitable, the unalterable rule. Each player was his own banker. If he hadn't the "color" with him, then there was no need of him "sitting in;" and, once in a game, there was no credit when a player went broke. It was for him to quit.

Anderson's raise was a staggering blow to the third man. He seemed to waver between hope and despair for a minute, and then said, "I'll come in," as if he were sorry. He placed twenty dollars on the table as if he fully expected never to see it again.

"I'll raise it twenty-five," said Logan, throwing in the necessary cash.

"And twenty-five more," responded Anderson, as he counted out his fifty.

Then the third man threw his into the discard and pushed back his chair.

"See you and raise you fifty," said Logan.

"And fifty more," replied Anderson.

"And make it another fifty," continued Logan, as he counted out the coin without a quiver.

"Hold on, I ain't got fifty," said Anderson, as he dug into his pockets. All of his searching revealed nothing. The fifty that he had put up with Slim Condon as a side bet was the last money that he had, save what lay before him, for the game. That had now dwindled down to the insignificant sum of twenty-two dollars.

"This is my limit," said Anderson, counting out the twenty-two, "unless I can withdraw that side bet with Slim."

Slim, who had simply been observing and saying nothing, looked at Anderson for a

moment, and then said: "I prefer to let it go as it lays."

"Let me draw down twenty-five of it," suggested Anderson.

Slim didn't move a muscle. "Let it go as it lays," he repeated.

"I'll bet you your limit—in cash—and then—" said Logan, reaching into the pot and counting himself out twenty-eight dollars.

"What do you mean by 'in cash'?" asked Anderson.

"I mean that, as we are the only two in the game, I'll bet you anything, aside from cash, that you want to put up."

"That goes," replied Anderson, tightly gripping the four kings in his Janney fists. "I'll bet you my three roan mares."

"Against my chestnut stallion? They're worth it," said Logan.

"Good. Here, Buck," and Anderson called to a young miner who was intently watching the game, "you keep these bets on paper. We'll lose track of them."

Buck sat in as recording secretary.

"I'll put up forty head of my two-year-old steers," Anderson went on. "Can you meet that?"

"I'll put up forty head of mine against them as a raise," replied Logan.

The betting between the two continued until the pot contained, besides the several hundred dollars, six hundred head of cattle, fourteen saddles, several hundred head of sheep, twenty acres of land, four heavy farm wagons, the three mares, the chestnut stallion, two gallons of red liquor, and six revolvers.

Buck had recorded each bet carefully. Several onlookers had gone about spreading the news, and soon the little room back of Casey's, where the exciting contest was being waged, was thronged with miners.

The two players sat opposite each other. Each had seen the other's bet with a grim determination. Neither had faltered. But now Anderson had bet everything that he possessed except his ranch—a matter of some thousand acres or so nestling in the Lagunitas foothills.

He had undying faith in his four kings. He honestly believed that they were not to be topped in this particular game. Logan had a big hand, or was only bluffing. His four kings were as safe and sure as the eternal hills.

However, he didn't want to put up the ranch or any part of it unless Logan would agree to put up the equivalent in something besides land. Anderson had all the land he

wanted. It was no object to him to add any more acres to his possessions; and, furthermore, there were great unclaimed ranges not fifty miles away where he could graze his steers at will, and fifty miles is only an easy jaunt in the vast Western region that claimed Lagunitas as its center.

"Tell you what I'll do," said Anderson, looking at his four kings to see if a fifth had not silently slipped in while the betting was going on—"tell you what I'll do. I'll put up my ranch against anything you've got, except land."

"'Cept land?" echoed Logan.

"I've got all the land I want," replied Anderson.

"You must think you're going to win," said Logan.

"I wouldn't bet this way if I wasn't sure of it." There was meaning in Anderson's face as he spoke. "You don't want to call me, do you?"

"If I did I would say so." Logan also spoke to show that there was no fooling so far as he was concerned.

"Well, what have you besides land?" queried Anderson.

Logan got up from his seat and stretched himself.

"Let me see," he said, somewhat uncertain. "I've got about everything in the pot now except my land and—and—"

"And what?" interjected Anderson.

"Four hundred dollars in the Lagunitas Bank," answered Logan, reaching into the pocket of his shirt and producing a faded bank-book.

"My ranch is worth fourteen thousand," said Anderson.

"Do you want to bet it all?" asked Logan.

"All. No part of it. What can you put up to represent the other ten thousand?"

"I don't know," said Logan cautiously.

"I do," replied Anderson with his customary brusqueness.

Logan looked at him for reply. The spectators stood widemouthed and awestricken. Not one dared to breathe a sound.

Anderson looked steadily at Logan. There was not a quiver in the big man's face. He arose and stood just across the table from his opponent, one hand clutching the four kings, the other resting idly on his waist.

Logan was mustering all that he possessed in a mental inventory. What in the name of all that is could Anderson mean? What had he overlooked? What did he possess of tangible quality of which Anderson was aware and he was in the dark?

"What do you refer to?" he finally asked Anderson.

There wasn't a man in the room who wasn't just as anxious to hear as Logan.

"Lucy Ames," said Anderson.

Every eye was turned on Logan.

The woman-hater of Lagunitas, the only man in camp who had withstood the wiles and guiles and snares and sentimentalities of the fair sex, had asked Tim Logan to actually make the woman he loved and had asked to be his wife part of the stakes in a poker game!

"Lucy Ames!" Logan spoke her name, and then began to gather his senses. "Why—why—she is engaged to me."

"You heard me, Tim. I ain't here to argue your matrimonial affairs. I'm playing poker."

"I can't do it, Anderson. You're asking too much."

"I'm playing poker," was all that the big man would say.

"Why don't you call me, if you've reached your limit?" asked Logan.

"I've got my ranch; you've got the girl and four hundred dollars. I want the girl."

"Well, you can't get her in a poker game!" Logan slammed the table as if he meant it.

"All right," went on Anderson. "I'll withdraw my property and you withdraw your bank-book. I'll call you—and then we fight for the girl."

Logan wanted time to consider this proposition—and he took it. He walked back and forth a few steps. He was turning it over in his mind. He was one of the few men in the camp who had not gone up against the fists of Anderson, and largely because he was a peace-loving creature. Fear, however, had no place in his heart, and, though he lacked four of Anderson's inches in height and twenty of his pounds in weight, he would "give him a go," and Lucy should be the stakes.

He stopped, looked Anderson squarely in the face, and said:

"You're on!"

The crowd gasped and shuddered. One or two muttered something. If there was any excitement it was not centered in the two players. Both were as cool and collected and game as true Westerners must be.

Anderson suddenly broke the buzz and hum with:

"I call you. What have you got?"

"Four aces," said Logan.

Anderson's mighty frame shook and the color came to his face as he glimpsed the

four winning spots and a ten of diamonds which Logan spread out before him.

"It's yours," he said.

He sat down and pushed the four kings into the discard.

Two or three of the spectators ventured to ask Anderson what he held, and Logan, too, would have given part of the pot to have known, but Anderson said not a word. He simply took the discard and shuffled it idly for a moment, then threw it into the middle of the table. Logan's hand was thrown on top and the pack completed. The two men sat down, and the deeds of conveyance from Anderson to Logan were quickly made, for it didn't take long to transfer property in Lagunitas.

The poker game was ended.

The preparations for the fight were made with the customary precision that attended such events. When two contestants had decided on a mill, it didn't require a year on the vaudeville circuits, followed by six months' training, with newspaper interviews, ex-prize-fighters for trainers, and the other accessories that adorn a professional battle.

Nearly every Lagunitas lad who could scrap was in trim at all hours of the day or night, and it so happened that Anderson, with his record for pugilistic supremacy, was ready then and there.

Logan, on the other hand, asked for a day. The long siege in the poker game—three days without much food and no sleep—had not left him in a fit condition to tackle the biggest punch-artist in the camp. Added to this, the stakes were his girl—his own best girl—and he wanted some show.

"I'll meet you to-morrow at Dick Stanley's. I'll be there at ten o'clock in the morning—sharp," said Logan.

"I'd rather pull it off now," answered Anderson. "I want to get through with this matter."

But Logan insisted. He wasn't in condition. It was unfair for Anderson to be so headstrong. Finally Anderson realized that the other man's objections were based on what was right, and he consented.

Dick Stanley's was just a plain, ordinary frontier saloon, where the most prominent happenings of Lagunitas were usually discussed. Back of it was a long, level field of some twenty acres, surrounded by shady oaks. In its center there had been erected a twenty-four-foot elevation of plain pine boards, appropriately roped in, and on this historic platform some of the greatest fistic encounters of the town had taken place.

The news of the Anderson-Logan bout spread with the rapidity of a frontier flame. Before it was fifteen minutes old, the news had begun to spread. In an hour most every man and woman in Lagunitas knew it; by night and the next morning, it had reached the near-by camps. In consequence, the crowd began to gather early the next morning, and long before the appointed hour some twenty acres of humanity—men, women, and children—were jostling one another for vantage spots on the sward.

Logan slept that night as never he slept before. He resolved that the meeting with the champion was not going to bother him. Though Anderson had vanquished every man who had stood before him, perhaps, in the parlance recently produced at Reno, he "couldn't come back." At any rate, it wasn't Logan's style to lose his head or worry. He would stand before the giant and take his medicine like the man he was; and, if he lost, he would say good-by to Lucy and wish her well.

As for Lucy, she had nothing to say in the matter. It had long been the Lagunitas method to fight for a woman, and it was the pride of the Lagunitas women to be pointed out in their society as the chosen one of a pugilistic victor.

Lucy took it philosophically. She had no doubt that Anderson would land a wallop on Logan's jaw that would drop the smaller man, and, with this in mind, she was prepared to accept the inevitable.

For the moment she was the center of attraction. Many from the neighboring camps who had never set eyes on her, came around to the little house where she passed her humdrum life with her parents, just to "take a peek," as they expressed it. Born eighteen years before in Kentucky, she had been brought to the camp with the rush of gold-seekers. She was a comely girl, with the blackest of raven locks and a wonderful smile and the most bewitching black eyes. For miles around she was the belle.

That is why Anderson, who had shunned all women, wanted to claim her for his own.

To do Anderson justice, he slept, too. Both men were awake early and both walked down to the cool, fast-flowing creek about a mile from town and cavorted in its invigorating water till the blood tingled and the appetite was put on razor-edge. Then each went to his home, ready for the frying bacon and eggs and the steaming coffee, which never taste so good as on the plains.

When the respective breakfasts of the con-

testants had been put away, it lacked just one hour of ten o'clock. Just what filled out this space of time is unnecessary here, save that Logan smoked his pipe and counted over his newly-acquired riches, and Anderson chewed on a mouthful of plug tobacco and wondered how he was going to start all over again to regain new wealth.

Both men entered the ring promptly on the moment. There was no array of trainers and ring-attendants; there were no fancy trunks and highly-colored bath-robos; there were no buckets of water, no sponges, no bell to toll off the seconds when one or the other went to the floor; there was no referee to keep the men within the rules, and count off the fatal ten when one of them struck the floor; and—there were no gloves.

No rules governed boxing-bouts in Lagunitas. It was simply a case of fight and fight fair—but fight. Foul tactics only rendered publicly unpopular the man who indulged in them. He was liable to be treated with the contumely that would make life a burden.

Anderson was the first to climb the paling that separated the ring from the crowd. He threw off his coat and hat and stood with bared and brawny arms while the crowd cheered. In a second later, Logan was also inside the ropes, hatless and coatless, the sleeves of his blue shirt rolled up to his armpits. In another second, both men had advanced to the ring and were squaring off.

Anderson looked more than a match for his rival. Big he was, and the strength in him showed in every movement of his body. Bets quickly ran through the crowd. The odds were ten, fifteen, even twenty to one, that Anderson would win. But there were those who did not hesitate at the short end.

Anderson feinted with his right, and Logan drew back. Then Logan came to the front with a strong right swing, which Anderson ducked, and the smaller man fanned the air in such a manner that it seemed as if he had lost his wind. Anderson, quick as a cat, sent a short left to Logan's head, and Logan caught it full on the jaw and staggered. The men holding the "long-end" bets began saying "I told you so."

Logan circled around Anderson with a neat and agile step. The blow in the jaw had been felt, and he was a trifle dizzy, and didn't want to mix it up again until he felt a little better. Anderson was trying to force the fighting; that was plain, for once or twice he rushed at his opponent, but Logan was too sly.

"Land on his right, Andy!" "Go in and slug, Andy!" "He's got no show, Andy!" were some of the encouraging sentiments hurled at the champion—but there were no cheers for Logan.

Anderson sparred cleverly until he had his man in a corner, and then he aimed to plant a right which would have ended the sport then and there—had it landed. But Logan anticipated it and ducked, and as he ducked his right shot up with stupendous force and landed square on the unprotected proboscis of Mr. Anderson. The champion reeled back, and the faces of the crowd turned pale as a small trickle of blood seamed his face.

Anderson gritted his teeth, for he was mad. He came at Logan with a terrific rush and a well-aimed right, but Logan was only too keen, and again he ducked and both men clinched.

At short range, Logan managed to land a few telling body-blows—and to receive a few—and as Anderson did not care for this style of give-and-take fighting, he fairly hurled Logan from him, and he struck against the ropes. Logan now knew that his best scheme was to wear his man out. So long as he could do so, he might have a chance.

So, whenever Anderson rushed, Logan took the opposite tactics, and there came a point when the champion started to end it all.

"I've got you now, Tim," he said, as he stepped back several paces and raised his Janney fists.

"Come on!" answered Tim, and Anderson came. He raised both clenched fists in the air and brought them down with the force of a pile-driver, but again the little man swerved out of the way. The force of the blow weakened the man who delivered it. His intent was to strike Logan on the head and end it, and now he was out of breath.

Logan rose to his full height and, while the champion was wondering what had happened, he received a rain of sharp, well-directed blows on his face that sent him staggering. Before he could come back, Logan sent in two to his stomach, and Anderson doubled up and went to his knees.

When he regained his feet he made another desperate lunge at Logan, and one staggering blow met the little man's jaw, but

Logan had him going, and he knew it. Again and again, he played on Anderson's wind, and again and again Anderson landed on him. The crowd marveled that he could stand such punishment. At length Logan saw an opening. One faultless swing went straight to the champion's eye and closed it; another caught him where he feared it most—in the wind. Anderson swung powerfully but futilely, and then a swift one from Logan caught his solar plexus so neatly that he reeled over and went down on his back.

The mighty Anderson was vanquished. He had failed to "come back." He lay prostrate for a few minutes; but, according to the code of Lagunitas, those few minutes were sufficient to count him out.

The crowd had begun to disperse, and a new luminary had appeared in the person of Tim Logan. The "short-enders" were cashing in their bets.

Logan, still calm, still the same cool, collected individual, reached for his hat and coat, put them on, and then assisted the fallen idol to his feet. He held out his hand, which Anderson took and shook with hearty feeling, for out there in Lagunitas no man could harbor a grudge, even after defeat.

In the general excitement that followed, a dark-haired, dark-eyed Kentucky girl made her way through the crowd and beamed the most wonderful smile on Tim Logan as he stepped down from the ring. Tim beamed in return.

"I wanted you to win, Tim," she said. "All night I prayed for you."

Then she put her arms around her hero, and kissed him. And Tim drew her close to him and kissed her.

"I went in to win, just as I went in to win you the first time I ever set eyes on you," he replied.

Late that afternoon, just as the last rays of the sun were slipping over the mountains, a solitary horseman might have been seen riding down the lone, dusty road that stretched from Lagunitas to the west. He wore a sad, dejected look—like some mighty conqueror who had fallen after fighting the fight that would have made him a hero of the ages.

It was the mighty Anderson making for pastures new.

Slap is the strongest cuppler on the markit, but it's orful hard to uncuppel it.—The Call Boy.

Told in the Roundhouse.

BY WALTER GARDNER SEAVER.

WORK on a construction-train that is constantly pushing ahead over a new, uneven road-bed is apt to carry with it some rough-and-ready experiences that differ somewhat from the every-day run of railroad routine found in an old-established division.

Contractor Mallory, concerning whose exploits a number of yarns have been spun, seems to have a faculty of bobbing up wherever any rough-house was about to start or a prank was being played. Two hoboes also figure in some rough-and-tumble tales that start the laugh-valve going, and help to pass the idle moments spent waiting for the cry of the call-boy.

And Mr. Seaver knows how to tell these tales

Startling and Amusing Situations that Developed from a Tendency Among Frontier Railroad Men to Keep Things in the Construction-Camp Constantly on the Move.

SEVENTEEN'S off again!"

"What's the matter now?"

"Tommie Maddern is pulling her with the deuce. Of course, the deuce had to break a back spring-hanger on her rear drivers and lift her trucks off the track."

"She is getting to be as bad as though she was No. 13, instead of the deuce."

"We had an engine on the Denver, Memphis and Atlantic with the same number, '2,' and everybody spoke of her as the deuce, and the three-spot as the tray. This Denver engine was well-named 'the deuce, for if there was any tricks calculated to make an engineer or fireman swear that she didn't know, I never heard of them."

"Mason, who came to us from the K. P., was about as good a runner as ever sat on the right side. He was a little reckless, it is true; and if he got behind time, which often happened, he would turn 'em for all that was out."

"The road had just been completed from Winfield to Belle Plain, and had not been fully surfaced. Mason got an order to take the deuce and pull a special, consisting of

the private car of Vice-President Mallory and the private car of Chief Engineer Thayer, of the Fitzgerald and Mallory Construction Company, from Winfield to Belle Plain, in Sumner County.

"The commissioners of Cowley County had been invited, as the trip was intended to be one of inspection. If the commissioners were satisfied with the road, the bonds on that portion of the line between Winfield and the Sumner County line, which was just east of Oxford, would be delivered to the contractors. At this place the road crossed the Arkansas River, and the bridge was a pile concern, only a temporary structure, as the iron bridge was to go in later.

"Now, as every railroad man in Kansas knows, the Arkansas is a treacherous stream. There was no bottom, and the piles were simply stuck in the sand. As a result, all trains had to crawl across. The road from Winfield to Oxford was full of low joints and high centers, and, taken all around, was about as tough a piece of track as could be found anywhere. How those commissioners ever accepted the road in that shape I never could understand.

"Mason had crawled over the new road carefully, and at Oxford got a clearance for Belle Plain. This part of the track had been well surfaced, and was in good condition for a new road-bed. He pulled out of Oxford, and told one of the officers of the railroad company, who was riding on the engine, that he was going to shake the hay-seeds up a bit.

"Billy got her down in the corner and opened her up, and away he went. Mallory



"MALLORY WAS NERVOUS, SO HE PULLED THE BELL-CORD."

was a nervous kind of a duck, and did not care for fast riding, so he pulled the bell-cord. Mason had unhooked the cord from the gong, and knew that he was being signaled to stop.

By some mistake, a material-train, loaded with iron for the new bridge at Oxford, had been let out of the Belle Plain yard, and met the special about half-way. At this point there was a bank on the left side, and

the Arkansas River was on the right, the road being laid along the west bank of the river.

"There was a stretch of straight track at this point, and one engineman saw the other about the same time. The tray and the deuce were sister engines, both eight-wheelers, and nearly alike in weights and everything else. Norris had charge of the tray, and was pulling the material-train.

"Both men sounded their whistles, plugged their engines, and went overboard. Mason went out through the right gangway, and the railroad official was close behind him, while the fireman went overboard through the left gangway. Mason and the railroad officer struck the edge of the fill, both alighting on their feet, but the new-made ground was treacherous and gave way, and the two rolled down the bank and plumped into the river. The fireman landed on his head in a sand-bank.

"Norris and his fireman went off on the left side of their engine—which was the river side—struck the edge of the bank, and tobogganed down into the water. Old man Mallory went out of his car over the rear platform, and landed on the ties in the middle of the track, in a sitting posture, with a dull thud which shook all Sumner County and caused the inhabitants to imagine that a shock of earthquake had occurred.

"Thayer was in his car, in the act of taking a drink of brandy, when the two engines came together. He sat down on the carpet, and poured his brandy out on it. The county commissioners were thrown out of their chairs, but were not hurt.

"The deuce reared up and tried to climb over the tray, which had also reared. Both engines were locked so close that they could not be pulled apart; but, aside from smashing the pilots and headlights, knocking off the stacks, and battering the front ends, neither engine was seriously damaged, both cylinder saddles standing the shock without fracture.

"When the engineman and the railroad official crawled out of the water and got back to the road, they were met by Mallory, and the remarks that he made were inclined to be scandalous, and not at all suited for a class of Sunday-school scholars.

"Mason and Norris did not pay any attention to the old man. They knew his ways, and simply went about examining their engines to see the amount of damage that had been done. The deuce and tray were sent to the Fort Scott and Wichita shops, two engines were borrowed from this road, and Mason and Norris sent out on them.

"Every man connected with the road at Belle Plain, from section-hand to train-despatcher, was called up on the carpet by Mallory, but that was all that it amounted to. After that, Mallory sent Thayer, who was his son-in-law, out with all specials on inspection of new track, and when it became necessary for him to go over the road, he did his inspection from the tail end of a material or construction train. Possibly he thought that his daughter could better afford to be a widow than he could take chances on leaving her fatherless.

"Mallory lived at Chariton, Iowa, and was one of the best-known railway contractors in the West, so that it was rare that a time came when he was not handling a heavy railroad contract somewhere in the Trans-Mississippi country.

"He had a force of men in the various departments that he took with him from contract to contract. These men were always putting up some job on the old man, yet there was not one of them but would have gone through fire and water to serve him.

"One day Mallory was out on the work, and had the train stop on the Grouse Creek Bridge, while he went ahead to examine it. Mason was there with the deuce, and when the train stopped he lit his pipe, and proceeded to take things easy.

"Will S. Cartter, of St. Louis, had the contract for the bridges, and he and Mallory went out on the bridge. Cartter stands six feet in his stockings, and is bald as a billiard-ball. The two men stopped on the center of the bridge, and Cartter was pointing at something. Mallory was a short man, and, standing beside Cartter, he put one in mind of Sydney Smith's remarks about the mile and the milestone.

"When Mason saw those two fellows there the deuce got into him, and whistling 'Brakes off,' he rang the bell, pulled the throttle, and started toward them. Mallory yelled at him, and he turned and sprinted for the other end of the bridge. Cartter was right behind him, and lost his hat at the first jump, his bald head glistening in the sunlight.

"Cartter had the advantage of Mallory in the length of legs, but Mallory's little tootsies twinkled in and out with twice the speed that Cartter could get up as they hit the ties. Mallory got to the end of the bridge, and did not stop to see where he was going, but tumbled down the bank. Mason swore that Cartter's first step took him down to the berm, and the second clean across the borrow-pit, while Mallory got stuck in the mud.

"Long before they reached the end of the bridge Mason had stopped, and he, with the fireman and conductor, were fairly doubled up in a paroxysm of laughter. Mallory made remarks about fool enginemen, and the more he articulated the harder the gang roared. Then, to add insult to injury, Cartter, when safe beyond the borrow-pit, joined in laughing at Mallory.

"If the road had not been shy of enginemen, Mallory would certainly have given Mason a lay-off, but they were behind time with their work, and the time was getting short for the completion of that section, so no more was heard of it.

"When the eastern division of the D., M. and A., from Coffeyville to Belle Plain, was completed, the two ends came together a few miles east of Tisdale, in Cowley County, and on the summit of the divide, about halfway between Tisdale and Dexter. There had been an elaborate program arranged for the ceremony of driving the last spike, and on the day appointed a special train pulled out from Winfield, having the county and city officials, reporters, and other dignitaries aboard.

"Upon reaching the spot, which was in a shallow cut, the Winfield party were met by a special train from the East, and a large crowd from Dexter, Tisdale, Burden, and the surrounding country had assembled at the spot.

"The usual speeches were made, and the regulation number of bouquets were thrown at the railroad officials, construction company, and others interested in the enterprise, and then came the ceremony of driving the last spike. 'Bill' Hackney, a bright lawyer, a leading politician, and at that time the mayor of Winfield, and Mallory took their positions, Mallory taking the spike outside the rail and Hackney the one inside.

"When those two men took hold of the spike-mauls, it was a sight for gods and men. Mallory took hold of his maul as though he wished he were anywhere else at the time, and Hackney handled his instrument as though he was afraid it would explode.



The boss track-layer started the two spikes into the tie with a few taps, and then Mallory and Hackney set to work, swinging their mauls alternately.

"The first stroke Mallory landed on the head of his spike, but Hackney swung wide, and struck the ball of the rail as though he was endeavoring to break it in two by a blow from the sledge. At the second stroke Mallory missed the spike altogether, and hit the tie with such force that he almost lost his balance.

"Ben Clover, of Burden, a farmer and leading Democratic politician who had been the most determined opponent the D., M. and A. had in the county, was standing near Hackney. When he swung for his second blow at the spike his foot slipped, and he spun around, catching Ben fair on the shin, and causing him to crumple up like a paw-paw leaf in frost-time.

"Ben swore that Hackney had deliberately fouled him, and it was no more than he could expect from a Republican politician.

Hackney apologized, and again swung for the spike, this time hitting it. Mallory, who had been leaning on his sledge, waiting for Hackney's stroke, again swung for the spike, this time hitting it a glancing blow, and knocking it clean out of the tie.

"The crowd hooted and yelled while the boss track-layer was setting another spike, and this time Mallory swung viciously, hitting the spike with the first square blow since he had essayed to drive it. Hackney came with another swing, and this time he also hit his spike. Two or three more blows, which happened to land fairly, sent the spikes about half-way home, and Mallory and Hackney then stepped back, and the boss track-layer and another took their places, and with one blow each sent the spikes home to the head.

"I would have given anything for a snap-shot of those fellows, Hackney and Mallory, especially if I

could have caught the expression upon the faces of the track-gang. If a man ever showed that he was thoroughly disgusted with his boss, it was that boss track-layer as he watched Mallory's attempts to drive those spikes home.

"Ben Clover was sent to the Legislature a few years afterward from that district on the Populist ticket, defeating Hackney and the Republicans, who had held sway ever since the county was organized; but Ben always swore that Bill Hackney had intentionally swung that sledge a glancing blow with the fell purpose of getting even with a political opponent.

"After the spikes were driven the engines blew their whistles and rang the bells, and made all the racket they could, while the crowd cheered. Then there were some more speeches, and the train from Winfield proceeded to back down to that point, followed by the special from Coffeyville, bringing all the people who cared to climb aboard.

"The trains pulled into Winfield with

bells ringing, whistles blowing, and cannon firing. There were more speeches, more bouquets, but nothing to eat. The crowd had to rustle its own grub.

"The road was formally opened for traffic from Coffeyville to Belle Plain the next day, but it is said that from that day up to the day of his death nothing could induce Mallory to drive the last spike on any of the work he had under contract.

"What made them so awkward?' asked Jimmie.

"Did you ever attempt to drive a railroad spike? If not, try it the first chance you get. In appearance, nothing is easier than the way in which spikers drive, but it is a special blow, only acquired by long practise. It is a safe bet that if Mallory and Hackney had either of them ever before tackled the job of driving a railroad spike into a tie alongside the rail, they would have left the honor to some one who was more expert."

"Pat O'Grady was the boss track-layer on the east end, and he had been with Mallory a long time; in fact, since Mallory took up railroad contracting after the war. Now, Pat was a devout believer in the virtues of the soil of the Emerald Isle, and though, by

his own confession, his parents left Ireland when he was hardly two years old, his impressions were vivid.

"Now, at that time the country from Winfield, in Cowley County, east to Caney, in Montgomery County, was a comparatively new section of Kansas, and settlers were coming in on the Osage diminished reserve in large numbers. Still, the greater portion of the country was virgin prairie, and the blue stem, as the prairie grass was termed, fairly teemed with rattlesnakes of all sizes, kinds, and conditions, from the little prairie rattler to the diamond-back.

"So numerous were they that it became a sort of religion with the settlers, and even with people who had occasion to travel on horseback or in buggies across the prairies, to immediately stop their horses or vehicles when they heard a rattler sing and, when they had located him, whip him with the buggy whip until he was unable to coil, and as a rattler can only strike when coiled, it was then easy to put the heel upon its head and end its career.

"During all the time of the construction of the road, it was in vain that the boys endeavored to get Pat reconciled to the presence of the rattlers. There was no danger



"CAUSING HIM TO CRUMPLE UP LIKE A PAW-PAW LEAF IN FROST-TIME."

that they would get up on the new road-bed, and Pat religiously heeded the admonition, 'Keep off the grass.'

"One day Mallory came along over the work in a buggy. He had killed several rattlers, and had their rattles with him.

"Mallory, like all other Irishmen, would willingly go without a meal if he could get a joke on the other fellow. He called Pat over to the buggy, and told him that he did not like the hat-band he was wearing, and had brought him another. While Mallory was getting it out Pat was profuse in his thanks, and he was too busy to notice what it was that Mallory was putting around his hat.

"Mallory handed him his dicer, and he put it on, but in doing so his hand happened to touch something cold and clammy. Pat jerked the hat from his head, and caught just a glimpse of a rattler coiled around the brim. Howling blue murder, Pat dropped the hat, and, in his excitement, stumbled down the bank into the borrow-pit, and the hat landed beside him.



"HOWLING BLUE MURDER, PAT DROPPED THE HAT,"

"Pat came pretty near throwing a fit right there, and Mallory began to be alarmed lest his joke was destined to have results that he had not anticipated. He jumped out of the buggy and clambered down the fill until he secured Pat's head-dress.

"Pat's eyes stood out like door-knobs. When he saw Mallory take off the snake, he could not be convinced that it was only an empty skin.

"But Mallory was not yet through with Pat.

"'O'Grady,' said he, 'a friend brought me a cigar-box full of the soil from old Killarney. I have brought it out for you to see.'

"Saying this, Mallory hauled out a cigar-box from under the seat, which he handed to Pat.

"'Sure, now, and it's happy I am that I lived to see the soil of old Ireland. An' what would yez be afther doin' wid it, sor?'" he asked.

"Why, Pat, I brought this out for you. You know that the touch of Irish soil is certain death to snakes and all other vermin, and you need have no fear of snakes so long as you keep this box of earth where they must run against it.'

"Pat took the box with extravagant expressions of joy. He was the envied of the envied among the rest. He guarded that box with the greatest of care, and none of the men in charge of the work could find it in their hearts to tell him that it was nothing more than a box of Grouse Creek earth that Mallory had scraped up at Dexter.

"The work was being pushed for the permanent bridge over Grouse Creek, though a structure of piles and false work was already in to carry the track over the stream. A blast had been put in on the west bank, where they were sinking foundation-pits for the abutment, and as it tore out the limestone it opened up a nest of rattlers of all sizes, ages, shapes, and conditions. The wrigglers shot out in every direction, and there was some lively work for a time, every man trying to kill as many snakes as he could.

"One of the boys lifted Pat's precious box of Irish soil from the car and set it upon the ground, where the snakes must crawl over it. Pat shouted:

"'Now, ye omadháuns, come on and see what the soil trod by the blessed St. Patrick will do to you!'"

"The snakes came on and crawled over and around the box, with no resulting harm. One of them even coiled on top of it.

"Sure, now," says Pat, 'the devil must be in the box.'

"When the battle was over, and no more snakes could be found, work was resumed; but when Pat went to camp that night he left the box behind him.

"Some of the men reminded him of it, and he replied that, while the soil of Ireland was doubtless sure death to any reptile that might chance upon the Emerald Isle, he was fully convinced that it lost its potency when carried across the sea.

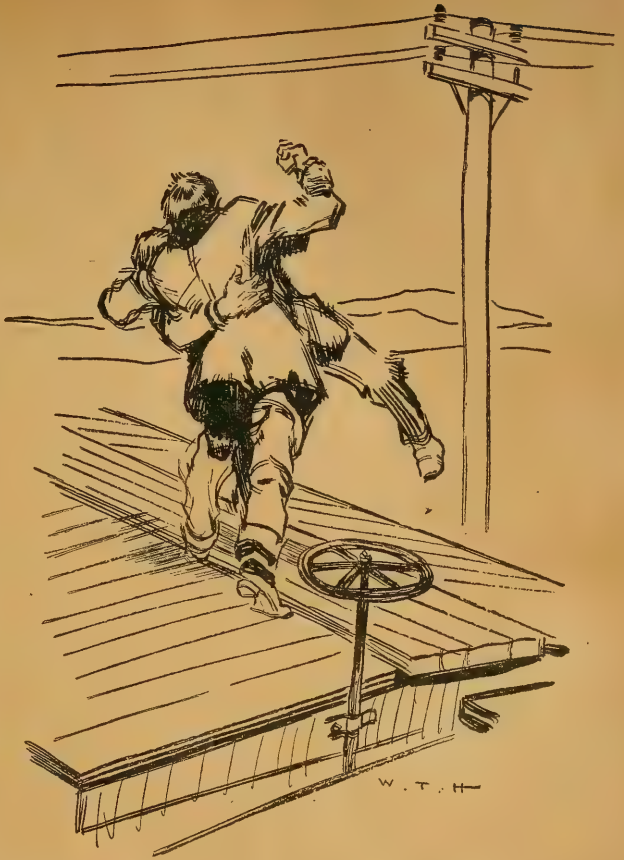
"There were always more or less hoboos around the construction-camps, but they were made to work or get out. If a man said he was tramping on the search for work, they would put him on the job in some capacity.

"Pat had little mercy on the man who would not work when it was offered him, and it occasionally happened that a hobo would try to slip away after Pat had given him a job, but it was rare that he succeeded. It soon got so that the professional hobo kept away from the work on the eastern division of the D., M. and A.; they were, at one time, pretty troublesome on the west end.

"We had a great deal of trouble with the hoboos when I was on the Cairo and St. Louis," said Watson. "Sometimes they came in such numbers that we could not keep the train clear of them. The boys set out a car at Red Bud, one day, that had a number of tramps concealed in it, and as the train pulled out one of the hoboos jumped out of the door and made a run for the train, catching on to a side ladder.

He hung there for a while, and then climbed up on the roof.

"He was spotted by the middle brakeman, who went for him at once, and the two clinched. The brakeman had the advantage of the hobo in one respect; he could keep his footing on the moving car much better than the tramp, but otherwise the tramp was a little the best man. It was beginning to look rather squally for the trainman when the hind brakeman happened to spy the tussle, and he hurried forward as fast as he could.



"BEGINNING TO LOOK RATHER SQUALLY FOR THE TRAINMAN."

"The tramp was doing the best he could to throw the brakeman from the top of the train, and appearances were that he was about to succeed, when the rear brakeman arrived. He took a hand, and it was then all day with the tramp. They were endeavoring to trip him and tie his hands and feet, and then turn him over to the city marshal upon arrival at Sparta.

"The tramp stumbled, and the whole gang were about to go overboard when the brakemen let go and narrowly missed going over the edge of the roof. The tramp was not so lucky. He went overboard, head first. The borrow-pit had a little water in it, and the bottom was soft mud. Into this Mr. Tramp went head first, and as the boys looked back they could see his legs waving all sorts of distress signals in the air.

"They flagged me down; I stopped, and they hustled back to help the tramp out of his mud-hole, but just as they touched the ground the tramp got on to his feet, and he was certainly a sight. If you know any-

thing about Illinois prairie mud, you know that it is black and decidedly sticky, and this is especially the case along the Mississippi bottoms. There is only one kind of mud that sticks worse, to my knowledge, and that is the black, waxy mud of Texas.

"The tramp managed to get the mud out of his mouth; and when the boys saw that he was not hurt they gave me the "Go ahead" sign, and as we pulled out the torrent of profanity that followed us was simply scandalous. If his curses could have come home to us we would certainly have been marked men for the rest of our lives; for if there was any ill luck that he did not wish that train-crew, both here and in the hereafter, none of us had ever heard of it.

"Ben Hodges used to tell of an experience he had on the Gulf, Colorado and Santa Fe. The only portion of the story that the boys were skeptical about was that a tramp would take a bath.

"He was clipping along with a south-bound freight, a little behind time. As he came to the Brazos crossing he saw a red flag on the side of the bank, just beyond the bridge. At this point the road, after crossing the bridge, curved to the west around the nose of a hill.

"Just as he dropped over the hill leading down to the Brazos Bridge he had a break-in-two, the break occurring three or four cars ahead of the caboose. Ben squealed for brakes and pulled her open. The brakemen could only hope to keep the runaway under control; so down the hill they went, Ben giving her another notch to keep away from the breakaway.

"Just as he reached the bottom of the hill, and took her by the neck to cross the bridge, he saw a red flag on the edge of the bank and just beyond the bridge. This meant that

the section-gang had a rail out beyond. To stop meant a tail-end smash, to go ahead meant to pile in the ditch; so he decided, as it was six of one and half a dozen of the other, he would let her go.

"He got down and stood behind his fireman in the left gangway, ready to jump, when they came up to the flag and saw that it was a red-flannel shirt, while down in the stream a tramp was splashing in the red flood as though he enjoyed cavorting in the tawny fluid. You know that the water of the Brazos at nearly all times is red, as also the waters of some other streams in Texas, especially the Colorado and the Red Rivers.

"The break-in-two stopped on the bridge, and Ben shut her off and then backed up to hook on to the tail end. The train-crew compelled the tramp to come ashore, and they wanted to know why in the blue blazes, if he wished to take a bath, he could not have hung his red shirt somewhere else.

"The tramp explained that the day was so warm that he thought it was a good time to take a bath and, at the same time, cleanse his soiled shirt, and that he hung it on that bush because it got the full benefit of the breeze sweeping across the river and the full glare of the sun, and protested that he did not think it was in the position that would make it resemble a section-gang's flag.

"The fellow was so honest about it that the boys forgot their anger, and that he had not got beyond the saving effects of a bath demonstrated that he was not utterly hopeless; so it ended by their taking him aboard the train and carrying him on to Temple. They got him a job as wiper in the roundhouse and the last that Ben heard of him he was still on the road."

"Here comes seventeen! So-long, boys!" And the roundhouse assembly adjourned.

RAILROADS VERSUS AUTOMOBILES.

NOT a little has been said and written of late about the various effects of the automobile demand in connection with the diversion to purchases of cars of funds which otherwise might be added to the capital held in savings-banks and similar institutions, or devoted to the purchase of securities of the income-yielding class.

It is now reported that certain railway officials are disposed to regard the automobile as having an adverse effect on passenger traffic.

No figures are adduced to show to what extent the motor deprives the railway of business, and, on the other hand, there are railroad men who are quoted as saying that the companies derive positive benefit from the multiplication of autos, apart

from the freight earnings, which are the result of transportation of the raw material and the product when finished.

Furthermore, it is held that business is actually brought to the railroads, particularly through the increased employment of auto-trucks, which haul four times the tonnage that can be carried by wagons with horses, and in from one-half to one-third the time which the latter require to bring goods to the freight stations for shipment.

The disposition of the farming population throughout the country to use autos in transporting their products renders them able to ship the same with much more independence, while it also stimulates the demand for better roads.—*Bradstreets.*



Worries of a Sleeping-Car Con.

BY SAMUEL P. FLINT.

THERE are few phases of railroading where diplomacy, tact, and ability to read between the lines of the rule-book play so important a part as in the daily routine of the sleeping-car conductor. Like the skipper on the high seas, he is the sole arbiter of all the troubles of the passengers. His judgment must be excellent and his wit quick, or he is sometimes apt to find himself in a most undesirable position.

Above all things, the Pullman Company and railroads operating their own sleepers desire that their patrons should not leave a train dissatisfied with the treatment accorded them, and a popular sleeping-car conductor often proves so valuable an asset that it is difficult to reckon his full value in dollars and cents.

Trying to Calm the Kickers and Keep Every Passenger Satisfied Requires the Wisdom of a Solomon, Combined with the Patience of Job and the Courage of a Wall Street Magnate.



THE Pullman Company has a book of rules for the guidance of sleeping-car conductors, but practically every rule may be broken and the conductor commended if he has used good judgment in breaking them.

The sleeping-car conductor is a czar, so to speak, and he can direct at will when occasion demands. Above his book of rules comes this unwritten law:

"Make your passengers comfortable and happy whatever comes up. Be a diplomat. Avoid friction. Scent out trouble and disturbance before it starts. Don't be afraid to

take responsibility upon yourself. What we want is to encourage people to ride on sleepers."

Every con knows it.

Obviously a sleeping-car is close quarters for everybody. The luxury of American travel has resulted in much being expected of it. The handsome fittings, the completeness of the equipment, make it essential that the susceptibilities of its occupants shall not be jarred. Even unreasonableness, if possible, must be given into and cajoled. It may be that there is a full car-load, including troublesome children; a few obstreperous people; others quietly insistent upon minor

points; some fussily demanding attention far over their share.

The sleeping-car conductor must harmonize all. Anything but dissatisfaction; a perfect trip for every one; is what an "instructor" tries to pound into each man, and some fine day when a new conductor, called into the division superintendent's office concerning a complaint, pulls proudly out his book of rules and justifies himself completely by rule 94, he is taken down a peg by being told that the company would rather lose unnumbered dollars than have had that complaint come in; that he should think of the company's business and pleasing its patrons before all.

Some men never thoroughly learn this lesson, and never become good sleeping-car conductors. Other men very frequently have their reports at the end of their runs filled with explanations. These are the men of whom such things as these are said:

"Jennie, we had the loveliest sleeping-car conductor coming on from Duluth."

"Mighty fine conductor on our train last night. Took a lot of interest, was companionable, and made everybody feel at home. You felt that man was running those cars. You knew he was about, with an eye on everything."

Such men are delivering the goods for which the traveling public is paying. They are worth almost their weight in gold, for a popular sleeping-car conductor is a far more valuable asset than he is ever apt to realize.

Day in and day out, it needs very nearly the wisdom of Solomon, the patience of Job, the courage of a Wall Street magnate, to prevent anything unpleasant from arising. It is not the part of a sleeping-car conductor to wait for anything to happen. He must anticipate complaints, and if the impending trouble comes through any of his passengers, he must smooth it out diplomatically.

He Woke the Wrong Snorer.

On a sleeper whirling through the Middle West, about three o'clock one morning, a watchful conductor passing along the aisle heard a rasping, snorting noise rising above the roar of the train. It was the kind of noise that is bound to waken somebody. It was a snore from a section at the end of the car.

Now, it is a risky thing to disturb snoring people. They are apt to take offense; but this conductor had a manner that had disentangled many difficulties, and he felt sure he could cope with the situation. Anyhow,

if that snoring kept on, half his car would be aroused inside of five minutes.

He walked softly to the snore, now very loud and annoying—and then he remembered. He stopped short. In that berth was a pretty girl. No, it couldn't be possible. Just at that instant the snore grew louder. Yes, he must stop it.

As quietly as he could, he awoke the snoring beauty. She was indignant; she protested. With tact he pacified her. But—what? The girl was awake and talking to him, and yet snores were still coming from the berth.

"Oh, I might as well confess," she said tartly, after a glance at the conductor's puzzled face. "You'll find it out, anyway. It's Jip."

She pulled out from where it had been tucked up at her feet a basket with a pug-dog sleeping the sleep of the lazy, well-fed pet.

"I couldn't bear to have him away from me even one single night. He's never been away from muvver, has oo, ducky daddlins? So I smuggled him aboard the train in this basket."

Pleasing the Children.

Another conductor, one whose run is a well-patronized train of sleepers that moves out of New York late in the afternoon, found his car rapidly getting into a mild turmoil one night because of a crying baby. Its young mother was traveling alone and could do nothing with the child. She looked worn-out. The book of rules said nothing about an emergency of this sort, but Mr. Conductor stepped quietly up to the berth and talked soothingly for a few moments to the mother. Then he emerged in the aisle with the baby in his arms.

There was something about Brown that gave every one confidence in him. The tired mother breathed a sigh of relief—the first for a long while. A little more, and she was in a doze. The big man in uniform fondled the tiny bundle he was holding, talked to it in a crooning voice, walked with it, moving it from side to side with the swaying motion of the car. The crying grew less and less; the baby dropped asleep.

In the smoking-room the conductor, for several hours, kept up a patient vigil over his little charge.

Such a case as this is unusual, but any number of times, the sleeping-car conductor has made himself solid with children by entertaining them before bed-time. A few such characteristics of one of these men may do

even more for his general popularity and effectiveness than with the children.

To the wise and capable conductor all these things are part of the discipline. On the long runs of the West, a sleeping-car conductor has often but one car in his charge; in the East he is the captain over several, with a porter for each, a maid, and a barber (if the train be a limited), and, perhaps, an assistant to relieve him of the detail work.

Routine of the Sleeper.

The handling of the tickets—"collecting," in railroad language—is the smallest part of his work. That and making out his report take but little time on a long night.

One conductor, now in New York, tells a story of how, on one run several years ago, in the night's tiresome watches, he used to make out his report slowly and in full detail, and, when he had finished it, tear it up and write it all over again, merely to have something to do.

There are hours of the night that drag heavily on a conductor, for they are eventless, and there is no work to be done. On some runs a conductor is allowed to spell his porters, and each steals a few hours' sleep. On others, a conductor must keep awake to the end of the run. In any event, he must sleep with one eye open lest he may be needed.

The best conductor, the experts of railroading say, is the man who makes his presence constantly felt, who is unobtrusively in evidence frequently, quietly following up the porter to see that he is attentive to patrons, besides keeping the car in apple-pie order, inviting requests and questions from the buyers of berths.

It is remarkable, these same experts say, the difference of men in this regard. Some will seem to see everything and can always be found instantly; others, while they are still good conductors and with whom no definite fault can be found are precisely the reverse, for they do not become a real part of their train.

Two Tickets for One Berth.

What brings out the sleeping-car conductor and shows his true powers as a tactician, are the cases of "duplicate sales." Mistakes will occur in the ticket offices of the big cities. A train in readiness for the night is about to start. People are being escorted to, or are personally finding their seats. Porters and conductor are alert. There is all

the comfortable bustle of the luxurious string of sleepers with their array of well-to-do passengers who have paid for the best and look for quick service and no friction whatever as their due.

There are two claimants for a certain berth. The sleeping-car tickets of both are in order. Somebody in an agency has blundered, but the train is already in motion. However the fault, the remedy is the province of the sleeping-car conductor, and he must make arrangements that will satisfy everybody.

The company takes the ground that, even if one person can prove he bought a berth a week before it was sold to the other person, one has precisely as good a claim for satisfaction as the other. Both have paid their money. The error is no fault of either. The conductor must take this view of it and nip in the bud what is apt to grow into a good-sized row, for the average traveler does not take such matters calmly, as a rule.

It is the personality of the conductor that saves the company from embarrassment or brings down upon it, in a sharp letter to the management, a strenuous "kick." A clever conductor who knows how to play on the minds of men and women, by sympathy, by interest, by special little maneuvers at which he is a master hand, can twist the aggrieved one into a new phase of thought and make him feel perfectly happy in a much inferior berth. Sometimes the same result is gained by a little trick of which the traveler is never aware.

A Clever Ruse.

A row was brewing on a certain sleeper that had just pulled out of Chicago. Two men had tickets for one berth. One of them jumped aboard at the last moment. When the conductor looked at the second man's ticket, he saw that it was the same old story, but he had always found it profitable to pretend to examine such tickets carefully.

That gave him a few seconds to plan out a little campaign and size up his man.

The ticket, like the one he had examined a moment before, called for lower 6. An idea occurred to him. The car was not full. As if by accident, he turned his back and hastily glanced at his car diagram. Lower 8, the next, was not taken. He made a hasty mark with his pencil and wheeled back to confront them.

"It's all right," he said cheerily. "Just a clerical error that doesn't mean anything.

The clerk wrote down '6' on your ticket instead of '8.' Your berth's '8.' See, it's marked here on the diagram."

The man never knew that the conductor had ingeniously gotten the best of him.

Conductors of sleeping-cars are required to report duplicate sales, but very frequently they do not. It seems to be one of the most difficult things in railroading to get a conductor to report a duplicate sale when he has adjusted the controversy with no ill-feeling, so far as can be seen.

"What was there to report?" asked Conductor D., when called to task in the troublesome case of Miss and Mrs. Robinson because he had sent in no record.

"I fixed it up all right inside of five minutes. Everybody was satisfied. Nobody complained."

None the less this case, that did not appear to matter, turned out to be an important one with regard to the company. Mrs. and Miss Robinson were going to Toledo. They reserved their sleeping-car berths at New York, two weeks in advance, and, on the afternoon of their journey, they boarded the train in plenty of time.

Some five minutes before the train started, a burly man with a loud voice came up the car's steps and told the porter to show him to berth 12.

"Ah t'ink dat's taken, sah," answered the porter. "Lady dar, sah."

"Nonsense," said the man. "I just bought it."

It was too important a question for the porter to settle. He went for the conductor, after making the man temporarily comfortable.

When the conductor came, he found the man's ticket perfectly correct, except that Miss Robinson was occupying the seat he claimed. Questioning developed that the women had bought their tickets long before, and were fully entitled to the seats they held.

The man did not deny that women had rights, but, in a blustering, rude, and assertive manner, he abused all railroads and sleeping-cars in general. The conductor got him to shut off his flow of profanity and to accept a berth a little way off from the one he had purchased.

"I'll take it," the burly man growled, "but I wouldn't unless it happened to be a lower berth. I tell you it's scoundrelly, the way you impose upon people, and take money under false pretenses."

The man was soon quieted, and the conductor thought he had done well. He had successfully handled a very angry man. But he had not counted upon the women, who had received the full effect of the interrupted tirade. They had not complained. They had said very little. Though he could see many things, he had not noticed that they had been terrified at the man's manner, and had been thrown into a state of nervousness.

Miss Robinson, who had been particularly upset, did not recover easily. Toledo was reached safely, and one of the first things Miss Robinson told a cousin they were visiting was their experience.

"It's the most annoying thing I ever heard," said the cousin. "Wait till George comes home."

George happened to be a man of big influence in that part of Ohio.

"You leave it to me," George said, when he heard the story. "It's disgraceful. I'll write to-morrow."

At his office the next morning he wrote a letter to the sleeping-car officials. The letter did not mince matters. It was so forcible that it went from one official to another. It took some time for the company to make peace with the two families.

Where Recruits Are Found.

The best conductors for sleeping-cars come from the ranks of men who have failed in other walks of life. Disheartened people are, of course, impossible for this work; but the man who has held his grip in misfortune is apt to be a very acceptable candidate. Men who have address, experience, and facility in handling persons of both sexes and all social grades are eventually the ones chosen to fill vacancies.

The permanence of such a position steadies a man that has been drifting aimlessly. A large proportion of them stick to it and find the work congenial. The maximum pay is only ninety-five dollars a month.

Man and wife can't run in two sections. They've got to take the same schedule and running orders. — Confessions of an Old Captain.

FLAGGING THE DONKEY.

BY C. W. BEELS.

The Trouble that Came to Tom Tower When He Took Tinklers Out of Town.



HE principal trouble with Tinklers was stubbornness—plain, untarnished stubbornness of the most supreme quality. He was born with it; his parents had been born with it, and his ancestors—so far as any authority on his particular species knew—possessed it. Therefore, he came by it honestly.

Tinklers belonged to that part of the animal kingdom known as jackasses. Some people qualify them by the more dignified name of donkey, but in all his deportment Tinklers never rose above the plane of a real, unmitigated jackass.

He had passed his early days in and around the little town of Norwich. He never stood much more than four feet in his unshod feet, and his shaggy coat, his long ears, and his monotonous, uncanny bray were as well known to the people of that prosperous village as was the statue of their first governor—bronzed and weather-beaten—standing in the center of the public square.

Just who of the ten thousand citizens of Norwich owned Tinklers nobody knew—and, likewise, nobody cared. He simply roamed hither and yon, devouring the luxuriant grass of the roadside in summer, and, in winter, becoming an object of charity for any stable-keeper who would take him in at night and give him a handful of hay.

For seven years he kept things going, and he prospered in his own particular way. For instance, he had a habit of getting squarely in front of approaching automobiles, where he would stand, like a statue, and even a lusty beating would not make him budge. Once, an infuriated tourist put on all power and dashed squarely into Tinklers, saying, "I don't care who owns the beast! I'll pay the damages willingly!"

But Tinklers only got mixed up in the

mechanism, and was extracted without any damage to himself, save a few scratches, while the tourist ruined a three-thousand-dollar car, and had to take the train home.

Then Tinklers's pet joy was to plant himself directly in front of the Norwich trolley as it came down Main Street, and bray defiance. It usually took the combined efforts of six men to remove him to the gutter, and each would administer a kick for good measure. But Tinklers's hide was immune to pain. Everybody in the town had either kicked or struck him at one time or another.

With the passing of time, his bray increased with his stubbornness, and his general behavior become such that he was a menace to the municipality. He took to braying at night for no reasonable cause whatsoever. The residents of the town were rapidly becoming victims of a form of nocturnal wakefulness that was rapidly undermining their nervous systems. Visitors actually refused to pay their hotel bills because of the unholy noise, and one or two of the oldest inhabitants finally threatened to sue the municipality if it were not abated.

That was the final straw.

"You really intend to sue?" asked the mayor of Norwich of old Peter Hines one day.

And Peter, who was close to his ninety-seventh year and openly challenged any other monogenarian to dispute his longevity, said:

"You can betcher boots, Mr. Mayor, I mean ter. I ain't a goin' to be driv to a early death by the brayin' o' thet jeckuss. Ef he ain't put out o' this here town afore next moon, I'll sue yer fer six hundred dollars."

That was a terrible defi. It was more than Norwich could stand. It sounded the end of Tinklers—so far as Norwich was concerned.

There was nothing for the municipality to

do but take action. So, at the next meeting of the town council, a resolution, properly framed by his honor the mayor, was unanimously passed authorizing that Tinklers be declared a public nuisance, and that he be sold at public auction "to the highest bidder thereof, at 10 A.M., July 27, 1910, *anno Domini*, in the public square."

The announcement was printed in some half a dozen papers in the towns around Norwich, for the nimble-minded municipality believed that no one in the home town would bid a cent for poor Tinklers. They were right in their conjecture, for, on the morning of the sale, just twenty people lined up in front of the auctioneer's stand, and fifteen of them were recognized as strangers.

On the previous night Tinklers had been roped and deliberately carried to the public square, where he was staked to a tree. Some ten feet of rope circumscribed his area, but a goodly supply of oats kept him in decent temper until the auction was over.

He didn't seem to mind the crowd that gathered around the auctioneer's stand. He remained perfectly quiet and passive, and he looked mighty good to Tom Tower, who had come eight miles from New Blunden after reading the alluring "ad."

The first bid for Tinklers was eighty cents. It came from a dealer in live stock who had heard of the donkey's bad manners, and who thought that he could be purchased cheap. But this prospective buyer had not reckoned on Tom Tower. Tom quickly raised his bid to a dollar.

The auctioneer warbled off "Doll-doll-doll-do-I-hear-the dollaquarter, do-I-hear-the dollaquarter-dolla-dolla-quarter," with the wonderfully indiscernible sing-song of his calling. Some unknown did bid in that amount. The live-stock dealer went over and took a close look at Tinklers, then returned and announced, "One dollar and thirty cents."

"One-thirty-five," called Tom.

"That's more than I'll give," said the live-stock man, and he elbowed his way through the crowd and went his way.

In vain did that auctioneer try to raise Tom Tower's bid. He used every artifice of his kind to make some one say "One-fifty" even, but there was not a whimper from the crowd. He lured every voluble sound in his system in pronouncing that figure, but to no purpose. Only the little children present cared a whit. They liked to hear him say it.

Finally, he changed his tactics. "Look, ladies and gentlemen," he said, gesticulating

with oratorical nicety, "look at that noble animal grazing there, and tell me if you ever saw a more perfect picture of docile decorum! Why, ladies and gentlemen, there is not a more perfect jackass in all this county. In breeding, in deportment, in looks—he is a perfect specimen of his kind! And I am bid the paltry sum of one dollar and thirty-five cents for him! Ladies and gentlemen, was there ever such a sacrifice? Do I hear the one-fifty? Do I hear one-fifty?"

The spectators looked into his face like so many mutes.

"Do I hear the one-forty?" he thundered.

Still the crowd was speechless. Tom Wickersham began to feel for his change.

"Ladies and gentlemen," continued the auctioneer, leaning far over and speaking very softly as if he were telling some awful secret, "am I obliged to let this valuable animal go for the paltry sum of one dollar and thirty-five cents? Do you understand what this sacrifice means? Gentlemen, I appeal to you? Is this valuable jackass, worth at least fifty dollars as a beast of burden, to be sacrificed for—"

"Sacrifice and be hanged!" piped the shrill voice of Peter Hines, who was watching the proceedings.

Of course everybody laughed, and the auctioneer saw that further persuasion was useless.

"Going—going!" he said, raising his mallet aloft. He hesitated, and repeated very slowly, "Going—going." Then he stopped. There was one more chance if any one wanted to raise the limit.

"Gone!" he shouted. The mallet came down with a thud. "He's yours, mister," said the auctioneer, turning to Tom; and Tom, who had the necessary sum ready, stepped up and paid, and Tinklers was his—hide and hoof.

Then came the rub.

Tinklers had to be removed to New Blunden.

He seemed loath to leave the oats which had been provided to keep him on his good behavior while the municipality of Norwich was being enriched by the sale of him.

There was a small supply left, and Tom took it for granted that it went with the donkey. So he gathered them into his hat, let Tinklers have a sniff of them, untied him, and started down the road.

The last that Norwich saw of its trouble was Tom in the lead, deftly manipulating the hat of oats as a decoy, and Tinklers following, a willing captive, his ears sticking out a foot

ahead of him, and some ten feet of good inch-rope dragging from his neck.

He followed patiently for about two miles; then he began to wonder if something new and strange hadn't come into his life. He looked Tom over for a moment, then shot out his nose, humped his back, and emitted the most piercing bellow that ever penetrated his new owner's ears.

Then turned his back on Tom, and looked somewhat sprightly in the direction of Norwich. Tom surmised that Tinklers's intentions weren't honest, so he began to maneuver for the rope. He was just in time, for Tinklers had just got into the return motion. Tom gave the rope a mighty lunge, and the surprised Tinklers turned.

"Come on!" yelled Tom.

He tugged at the rope, and Tinklers followed unconcernedly for about half a mile. Suddenly he got the notion in his head that he had better stop. He planted his four hoofs so firmly in the ground that Tom couldn't budge him. Tom tugged and tugged and cursed and tugged again, but Tinklers was his old self. Tom got behind him and tried to push; he caught him by the ears and twisted them till they must have pained; he tickled his ribs with a whisk of grass—but Tinklers only stood as adamant as if he had been carved in stone.

Tom saw that such tactics were useless, so he resorted to more diplomatic means. He produced the hatful of oats and let Tinklers have a taste. Then he walked down the road about fifty feet and shook the hat and called, "Here, Tinklers! Here, Tinklers!"

Tinklers moved on and got another nibble, and Tom proceeded another fifty feet and used the same demonstration, and again Tinklers responded. This scheme of procedure was kept going for about half a mile. Finally, Tom noticed that about one more bite and the oats would be at an end. Then what?

He took in his surroundings, and estimated that he had about five miles yet to go. At the rate of a bite of oats for every fifty feet, it would require about a ton of feed before he reached New Blunden.

The oats did give out, but for two laps of fifty feet Tom successfully decoyed Tinklers into believing that the hat did contain something. However, the third time it failed Tinklers brayed his keen dislike at being fooled, and again turned his head in the direction of Norwich.

Tom lured him with bunches of freshly picked grass and soft words. He called,

"Tinkle, Tinkle, Tinkle," and snapped his fingers to add to the enticement—but Tinklers was wise. He wanted oats or he wanted home.

Tom picked up the rope and put it over his shoulder. He managed to catch Tinklers off his guard, and gave him a lunge which nearly took the animal off its feet. The momentum was in Tom's favor, and it kept so for some little distance, but Tom could gradually feel it grow weaker as Tinklers slowly but surely got his feet into the earth.

Tom tugged and pulled. Ahead, some hundred or so feet, the double tracks of the Midland Lines crossed the road. "I must get him over the tracks," quoth Tom to his soul, "then I can tie him to the fence-post, and go to a near-by farm and buy some more oats."

It was nip and tuck between man and beast. First one gained ground and then the other. The progress was in Tom's favor. It was slow but certain. It was a mighty tussle and it was telling on him. He was fast losing strength, but he felt that he could hold out until he crossed the track. Tinklers had his head down and was trying hard for a footing. His tongue hung out and the rope cut cruelly at his neck—but he was game.

Finally, the track was reached. It needed only a few feet more, however, and there—not twenty feet away—was the good stout post to which he would hitch his recalcitrant purchase while he hustled for more of the decoy.

But it happened—as it seemed bound to happen—that the minute Tinklers struck the middle of the track on which the east-bound trains passed, he got the best of the tug-of-war, and came to a full stop.

Tom was all in. He sat down in the middle of the road and pulled, and the more he pulled the less Tinklers budged. The donkey's feet seemed glued to the boards between the rails. Once Tom slacked on the rope just the slightest, but this only gave Tinklers a chance to plant his feet the firmer.

There he stood, his ears laid back on his neck, and his long nose pointed directly at Tom—and there he stood when the Plymouth Rock Limited loomed up in the distance.

Engineer Dorgan of the Plymouth Rock spied the obstruction. He was making a good sixty miles per, and was ten minutes behind his schedule at that.

He didn't want to stop, and he began to sound the most fancy score in whistling that was ever heard in that vicinity. Tom fairly leaped behind Tinklers and began to shove.

Tinklers was shoveless. He just wouldn't

be moved. Dorgan tied down the whistle-lever and put on the air. Tom shoved, conjured, kicked, cajoled, and performed other stunts, first at Tinklers's head, then at his tail—but Tinklers had made up his mind.

There was only one thing for Dorgan to do, and that was to come to a full stop. He ran close to Tinklers, jammed down the air, jumped down from his cab, and the conductor and several trainmen soon joined him.

"What in the name of Sam Hill do you mean by getting that thing on the track just as we were coming along?" asked Dorgan.

Tom was breathless. He couldn't speak.

"Get him off!" shouted Dorgan, as he rushed up to Tinklers and gave him a push. Dorgan was not a light-weight, but the manner in which he rebounded after landing against Tinklers gave him some assurance of the terrible plight of poor Tom.

"We've got to get him off the track somehow," broke in the conductor. Dorgan's look was a sufficient answer for so foolish a question.

"Let's lift him off," said the fireman.

"That's the talk, Billy," said Dorgan. "Come on. All together!"

Dorgan and Billy got at one end of the beast and Tom and the conductor at the other. Two trainmen added their strength at the middle, and the sextet began to maneuver.

So soon as Tinklers realized that he was being propelled against his wishes, he bit and kicked and brayed, and his captors were not for carrying him far. They managed to get him off the track, however, and they set him down on all fours just by the cylinder, with his head facing in the direction of Nowich.

"Now let us get out of here," said Dorgan, as he and the fireman climbed into the cab.

The conductor gave the sign, and Dorgan opened the throttle. A long, hot spray shot out from the exhaust as the drivers turned.

It hit Tinklers squarely, and all the pent-up energy of his stubborn soul was suddenly exerted in a desire to run.

If he had been shot from a cannon he couldn't have made greater speed.

"We certainly got him going," said Billy to Dorgan, as he watched Tinklers hoofing it along the pike.

"If we could go that fast for the next fifty miles, we'd make up all we've lost," answered Dorgan.

But Tom was almost speechless. He sat on a tie hoping that Tinklers would stop, but, for once, there was evidently no stop in Tinklers.

"That donkey was a lemon," Tom finally said, as he rose and turned his steps in the direction of New Blunden. "Guess I'll let him go, anyhow."

The good citizens of Nowich, that night, went to the first peaceful sleep they had known in ages, after heartily congratulating themselves on getting rid of their pest and adding to the town treasury at the same time.

"I tell ye, boys, I feel like I added another quarter century to my life," ejaculated old Pete Hines, as he said good-night.

About one o'clock in the morning Pete was dreaming. Something long and loud and very familiar sounded in his ears. He started as if in a nightmare. He sat up in bed and pinched himself, and then he listened.

"Guess I was dreamin'," piped old Pete as he snuggled under the blankets again.

Then Tinklers, in his familiar abode in the public square, emitted his choicest and most unmusical melody so the populace would know how glad he was to be home.

Old Pete started and sat up. It was neither a dream nor a nightmare.

"I'm jiggered ef I don't take the law of this taown in my own hands," he said, as he got up and reached for his gun.

FRUIT SPECIAL BREAKS SPEED RECORD.

FROM Sacramento, California, to Chicago in eighty-four hours, or three and a half days, is the record made by the Western Pacific Railway special fruit train which left Sacramento at midnight, July 13. This is the time being made by the Overland Limited passenger and express-trains. The former freight-train record was five days, made by an orange shipment out of Los

Angeles. Three different companies, all in the Gould system, handled the fruit special. On the fourth day out of Sacramento the fruit was on the market in Chicago. The Southern Pacific Company places its fruit-trains in Chicago on the sixth or seventh day. The feat of the Gould road is considered remarkable.—*Railroad and Engineering Review.*



The G. P. A. and His Job.

BY THADDEUS S. DAYTON.

GETTING business for a railroad by persuading the prospective traveler to become a passenger over its lines, seems, at first glance, a most hopeless sort of undertaking, but a little study of the workings of the G. P. A.'s department in a prosperous railroad company tells a different story. There are more ways than one to fill up the plush-covered seats.

Passenger-trains that continue to run with empty cars soon vanish from the schedule, no matter how well they may be operated or how low the running expenses are kept.

The general passenger agent has little or no authority over the men who operate the trains and keep clear the right-of-way, but nevertheless the part he plays in the game of railroading goes far toward determining how much rolling-stock shall be kept in motion and whether the passengers shall be few or many—and, too, he is pretty good when it comes to increasing dividends.

The Man Who Cares for the Comfort and Convenience of the Traveling Public Must Be a Student of Human Nature, Able to Tell the Real from the Pinchbeck.



GENERAL passenger agents earn from \$2,000 to \$10,000 a year, and sometimes even more. It is one of the most desirable places in the railway service on the long road that leads to the top, and the question is often asked, how can a youth who has just entered the general passenger department, or one who has been employed there for more or less time, rise steadily so that he may some day fill the chief chair in the inner sanctum, instead of continuing to occupy an undistinguished seat in one of the outer offices?

It is impossible to formulate any set of rules to bring about this desirable result. The best that can be done is to point out to the anxious or interested reader who is ambitious to climb far up the railroad ladder some of the things that he should and should not do if he wishes to succeed.

These caution and danger signals, as it were, have been gathered from talks with

some of the most eminent passenger officials in this country, who, however, for one reason or another have asked that their names be omitted from this article.

Before entering upon this part of the subject, however, it is necessary to make a beginning with a brief but comprehensive description of the intricate machinery which constitutes the organization of the average general passenger agent's office. It is a curious fact that but few of the public at large, or even the members of such a department itself, fully understand how it is made up and what the actual duties of the various sub-departments are, all of which, on a successful road, constitute, from top to bottom, the reason why the trains are always well filled and the passengers contented.

To begin with, there are about seven hundred passenger agents of railroads, great and small, in the United States. They sold to the general public last year more than half a billion dollars' worth of transportation. To

be exact, the railways of this country carried 816,000,000 passengers—equal to half the population of the entire earth in the number of fares paid. Each one of the seven hundred-odd general passenger agents had to keep his staff continually busy in order to get his share of the money paid for moving this vast number of people from one place to another. His passenger-trains had to run each day, no matter how few they carried. It was his business, however, to keep the seats filled.

The organization of a general passenger agent's office on a large and busy railway does not differ materially from that of any other line except in matters due to local conditions. On some of the big systems, however, there is a general traffic manager who outlines the policies of both the freight and passenger departments.

The specific head of the passenger department, however, is the general passenger agent, who is held directly responsible for the getting and keeping of the business of swiftly and comfortably transporting people to and fro. He has to know human nature thoroughly. He must know how far to go, which means how much money to spend, in catering to the personal whims, luxurious tastes, and individual vanities of the great traveling public.

A Student of Human Nature.

His must be the mature wisdom to decide how many trains shall be run and at what points they shall stop to pick up passengers. He must get his share of the business from connecting lines at the various great traffic gateways like New York, Buffalo, Chicago, and St. Louis. In short, he must sell all the passenger transportation that his road can turn out, and the cost of delivering the goods must leave a fair margin of profit.

Every general passenger agent has a chief clerk who relieves him of an enormous mass of detail work. Practically all the sub-departments report to the general passenger agent through this chief clerk. One of his principal duties is supposed to be to read and sort out the vast amount of mail that comes addressed to the general passenger agent every day in the year.

This is possible for the chief clerk on one of the smaller roads, but in a big office this task is generally delegated to one or more assistants, who have the experience and intelligence necessary to run swiftly through the great stacks of letters, sort them properly for distribution, and unerringly cull out for

their chief's attention any that are of especial importance.

Duties of the Chief Clerk.

The next in line in the outer office is the assistant chief clerk. He sits in the room where the public enters, and sometimes has to sift the wants of perhaps a thousand people a day, who call and ask for the general passenger agent. This assistant chief clerk possesses the same qualifications that every member of the general passenger department should have, but developed to an astonishing degree of efficiency. He must be perfectly informed about everything that has happened or can happen in the passenger department.

One of the most important divisions of the general passenger office is the rate department. In the New York Central general offices this is in charge of a chief clerk, who has fifteen experts under him. Through passenger rates—that is, rates covering the transportation of passengers by two or more different companies—are continually changing. These changes arise from different causes.

Recently, for example, the States of Iowa and Illinois enacted legislation making the maximum passenger fare on railroads within their boundaries two cents per mile.

This, of course, immediately upset all the through rates of the railways entering or crossing those States. The rate departments of the railroads interested had to refigure and agree upon an entirely new set of fares to be charged, and had also to arrive at the proper division of the proceeds of ticket sales. It is the duty of the rate clerk to keep the general passenger agent continually posted on any important changes in through rates and the proportions accruing to each road, together with his deductions on the general causes or effects of such changes.

Departments Controlled by the G. P. A.

The ticket redemption bureau is a department with which the general public is more familiar. If a person buys a round-trip ticket and only uses it one way, he can send the unused portion to the general passenger agent of the road he bought it from, and very quickly receive the company's check for its value.

It does not matter whether the ticket is from New York to Tarrytown and back or from New York to San Francisco and return.

After the ticket redemption bureau has passed upon and authorized the refund the customer gets his money back in a remarkably short space of time.

The advertising department has charge of getting up the folders, advertising literature, time-tables, and posters that are used for keeping the railroad continually before the public eye, and seeing that an adequate supply of time-tables is continually available at the innumerable places where the public may wish to find them. It is one of the duties of this department to take the official time-tables gotten up by the operating department, which relate only to the movement of trains from one end of the road to the other, and to arrange them for publication so that every possible connection with other roads is clearly shown, as well as condensed time-tables to points far distant from the terminus of its own line.

That this is no small task may be more fully realized when it is explained that these time-tables are supposed to be absolutely accurate, even in regard to the movement of the through trains over lines thousands of miles away. A sudden change in the time-cards of any single line means corresponding changes in the time-tables of all the other roads. The advertising department, therefore, has to keep continually on the alert in order that the public may always be supplied with exact information.

If a person desires a special car or a special train, no matter through whom he orders it, it is the excursion bureau of the general passenger-agent's office that attends to the details.

Transportation for Travelers.

This same sub-department, as its name indicates, also has direct charge of handing all the excursion business of the road. It does not solicit this traffic, but simply attends to caring for it as fast as the orders come in from the district passenger-agents in or out of town.

The last of the large sub-departments of the general passenger-agent's office is that which has charge of receiving from the printers and issuing to the various ticket-agents the enormous number of railway tickets sold each year. These tickets are of every kind, from the little piece of thick-pasteboard good only for a ride between points on the issuing line up to the yard-long strips that will carry a passenger from New York to the other end of the country and back.

None of the departments immediately surrounding the general passenger-agent's office is directly concerned with getting business. They are necessarily active in taking care of the business that other sub-departments secure. Some of these sub-departments are the district passenger-agents' offices and their sub-agents, which are scattered throughout every business center in the United States.

How the Trains Are Filled.

If the agent of an Eastern line in Denver, for example, hears of one or more people who are about to start for New York, he loses no time in calling on them, and endeavoring to induce them to travel over his line from Chicago eastward. In New York City each of the great trunk lines has a considerable staff of men who are continually drumming up business. While they do not overlook the solitary individual who desires to travel, they are particularly keen in their pursuit of large and small bodies of people who may be induced to make journeys over their particular line.

Conventions and other large movements of people are especially sought after, and sometimes plans are made for them as much as a year in advance. There are several from each passenger department who make it their especial business to look after the transportation of the hundreds of theatrical companies that leave New York every season. Others pay particular attention to all sorts of political people and their gatherings.

Still others keep close watch of the hotels, on the lookout for parties of people who may desire to travel westward. Still others circulate among the great mercantile houses who send out armies of traveling men. Another class of these specialists who solicit passenger traffic in New York are the men who go down the bay to meet the incoming steamships from every corner of the earth. They, too, are especially in search of parties of travelers.

They do not, of course, run about the decks buttonholing every first-class passenger, but quietly secure all the information possible from the ship's people, and then follow up their clues unobtrusively but with certainty.

After all, it is the getting of the business that counts; and these ever-alert men, continually in touch with every phase of life, get a training and experience that is invaluable. A youth cannot become a full-fledged and successful passenger solicitor at

once, but it is one of the rounds of the ladder that it is desirable to rest on in the climb up to the chief's chair at the top.

The School of the G. P. A.

"Surveying the vista of the work I have done since I entered the railway service, about twenty-five years ago," said the G. P. A. of one of the biggest Western railway systems, "I should say that the hardest thing about the general passenger agent's job is the getting of it. If a man has the ability and experience to climb up to that place, the bulk of his work is over.

"He should know more about the passenger business than any of his subordinates, and as much as any of his competitors; therefore, all he has to do is to keep his wits about him, and let his actions be guided by the lamp of experience. If he is the rare kind of man who never makes the same mistake twice, he need fear nothing; and the exceedingly responsible duties of his office will rest very lightly on his shoulders.

"But what should a young man do to get the experience so he too may some day sit in the easiest chair in the best office and give orders?' He must work unceasingly, learn, and remember. He must train himself to have the patience of the patriarchs, the suavity of a trained diplomat, and be a compendium of knowledge which, if it related to some of the sciences, would give him a professor's chair.

"All these qualities may be developed if they latently exist in the boy's system. Office training first, I should say, so as to get the run of how the big machine is put together; then, later on, when he is capable, a careful try-out at soliciting.

"Let him always be on the lookout for a new and better job in the same department. The more he learns and assimilates, and stores away for future use, the more valuable he is. I believe that, during the score of years that I was studying to be G. P. A., as it were, I filled about every job in the department.

"I venture to say, right now, with all due modesty, that I could step out and do almost anything in this office, or in the branches outside, quite as well or a little better than it is being done by my subordinates, from opening the mail and copying letters up to getting a shade the best of it on rate divisions.

"What should a young man avoid if he wants to succeed? He must not be afraid

of being too pushing. The world generally makes away for the young man in a hurry. He must never shirk anything, no matter how disagreeable the duty. He cannot be a time-server, for the hours of labor in the passenger department are not regulated by any union.

"He must never be contented, but he must not show it. By that I mean that his ambition to get the boss's job must never sleep. These are only a few of the things; but there is one other that is almost as valuable as all the rest put together: the young man who rises high is the one who doesn't dissipate, who always gets a good night's sleep whenever his work will let him, who always keeps in the best of physical condition.

"But, after all, if a man has got it in him, he'll win out, no matter where you put him, in this business or any other."

Pointers from Men Who Know.

The G. P. A. of a big Eastern trunk line was asked how he got his job. "Worked for it unremittingly for a good many years," he answered. "I started in this very office that room outside there, where you entered, slitting open stacks of letters when I was a boy of eighteen. That was and is the humblest round of the ladder in the G. P. A.'s office.

"I was told to open the letters, straighten them out, see that the enclosures were securely attached, and then place them on the chief clerk's desk for distribution. There were hundreds of letters in those days, where there are thousands every morning now. So I made it a point to find out as much as I could about each of the departments in our office, and then to read the letters and endeavor to sort them myself.

"Of course, I always placed the different lots all in one big pile on the chief clerk's desk. I had been here about four months when the chief clerk called me in one afternoon, told me he knew what I had been doing, and in future to put the letters in separate piles just as I would assort them for distribution, and to lay aside any that seemed of sufficient importance for him to look after personally.

How One G. P. A. Got His Job.

"Later on I learned stenography, and found out what sort of answers were sent. I climbed up a little every year, always grabbing every new and better job that I saw, and

somehow making good in it. Stenography is invaluable for a young man who wants to rise quickly. It puts him on the inside, in touch with the movement of things, at once, and teaches him more in a year than he would learn in some other position in five.

"Courtesy is the greatest asset, however, in the passenger business as well as any other. I remember a typical instance that happened the other day that cost a young man his job, just because he wasn't courteous. I went into one of our big ticket offices on Broadway. An idea had just occurred to me, and I needed but one bit of technical information to piece it out and make it valuable.

"This bit of information was something that, under the Interstate Commerce Commission's rulings, should be on file for the public in all ticket offices. I therefore asked the young man in charge at the noon hour—he didn't know me and I didn't tell him who I was—what I wanted to know. He answered brusksly that he couldn't give me any such information.

"I told him why he should, and asked him to phone the G. P. A.'s office if he didn't believe me. He replied that that was a ticket office and not a bureau of miscellaneous information. Then I left. So did the young man, later, for employees of that sort are likely to cost the road thousands of dollars in the course of a year.

"Another class, but an inoffensive one, is that which is made up of the patient plodders who are content to do their work, and no more, year after year, satisfied with a small increase in salary now and then. Some G. P. A.'s regard these as the backbone of the department, but I like better the pushing, aggressive fellow whose brain is continually on the alert. The passenger department, in my opinion, is no place for plodders. If you run trains a mile a minute and better, you've got to think and act at the same rate."

What Two Men Saw.

To be a close observer of things was the hobby of one of the greatest passenger men that New York ever knew. A man came into his office one day and asked for a job. He had been doing fairly well with another line, but had quit on account of some disagreement. The old G. P. A. listened carefully.

"All right," he said, "I'm going to be pretty busy for a few minutes. Suppose you go down-stairs and stand on the street corner by the fruit-stand for ten minutes, and then come back and tell me what you saw."

The applicant was a little surprised, but obeyed without question. In ten minutes he was back.

"Well, what did you see?" asked the general passenger agent.

"Why, I saw a lot of people passing to and from going into the station. There was nothing extraordinary about any of them. On the fruit-stand, which appeared to be kept by an Italian or Greek, I don't know which, there was a lot of the finest and biggest red apples I ever saw. There was a lot of other fruit, too, but the apples caught my eye."

"What was he selling them for?"

"I don't know, but I can find out."

"Where did the apples come from? What kind are they? How much do they cost a barrel? Are they sweet or sour?"

"I really do not know."

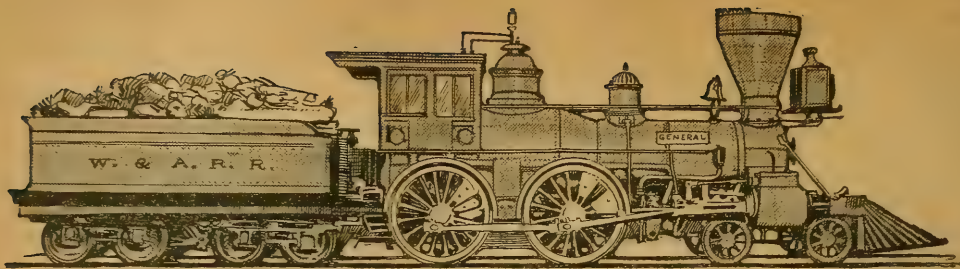
A Rare Gift.

The G. P. A. pressed a button. A bright, alert clerk bustled in. "Mr. Smith," said the G. P. A., "I wish you'd put on your coat and go down to the corner where the fruit-stand is and get me a couple of those red apples. No hurry—take a look around while you're there, and let me know if there's anything you see that strikes you especially."

Smith was back in less than five minutes and laid two big, red apples on the chief's desk. "Five cents," he remarked. "What else do you know about 'em?" inquired the old G. P. A. as he took a bite.

"They cost the dealer \$2 a barrel delivered. There are between four hundred and five hundred in each barrel, so he makes a good profit. They are called Spitzenburg, and they come from a competitive point on our road not far from Buffalo. Another line seems to be hauling all of them—there is an enormous crop, and they are making up a lot into cider. It might be a good plan to try an experiment and run a little excursion down to that place from Buffalo next Sunday—so that people can see the ground red with apples and drink cider—"

"That'll do, Smith. Good idea. Take it up with the Buffalo agent, and see what he thinks about it." Then the G. P. A. turned to the applicant. "I don't see where we can use you," he remarked; "what I'm always trying to get is the man who can see things, and turn the things he sees to account in a business way. The seeing eye and the discerning mind are rare gifts when combined. Cultivate them, and come and see me again a few months from now. Good day."



THE LOCOMOTIVE "GENERAL" AS SHE NOW APPEARS IN THE UNION DEPOT AT CHATTANOOGA, TENNESSEE. DRAWN FROM A PHOTOGRAPH.

Copyright, Detroit Photograph Co.

ARE "GENERAL" AND "HERO" IDENTICAL?

Some New Light on the History of Andrews's Famous Locomotive, Which Makes It Appear to Have Undergone a Change of Name and Structure.

AN old-time reader of THE RAILROAD MAN'S MAGAZINE, residing in Fishkill Landing, New York, has sent us, with the illustration on the opposite page, what we believe to be an authentic version of the circumstances surrounding the history of the famous locomotive of Civil War times, commonly known as the "General," which was captured from the Confederate forces by Andrews and his men serving under General O. M. Mitchell, and which is now on exhibition in the Union Depot at Chattanooga, Tennessee.

The drawing of the "Hero," which appears on the opposite page, is from an old print, the original of which, we understand, is in Washington. The following is the *exact* reading matter on the print: "Engine 'Hero.' Destroyed partially by Rebels when evacuating Atlanta, Ga. This is the Engine used by Mitchell's men in their attempt to burn the R. R. bridges. They were caught upon it and hung in Atlanta, Ga." Accompanying report of Capt. O. M. Poe, U. S. Engrs.; Series I, Vol. XXXVIII, Part I—Pages 137 and 139. See also report of J. Holt, Judge Advocate Gen. U. S. Army; Series I, Vol. X, Part I,—Page 630.

We have received many letters from our readers asking for information regarding this historic engine, and as there seems to be some doubt as to whether the locomotive now on exhibition, is really the one in which Andrews made his hair-raising ride, or whether it is only masquerading under a new name, we take pleasure in publishing the picture and following communication, which may set at rest any doubts regarding its identity:

EDITOR, THE RAILROAD MAN'S MAGAZINE:

For some time it has been my aim to discover the first records containing the name of the locomotive used by Andrews in his famous raid. I

have examined the newspapers published in Atlanta, Augusta, Charleston, Savannah, Richmond, and other Southern cities, published during the months of April and May, 1862, which contain accounts of the episode, but not one of them mentions the name of the captured locomotive. Even the report of Judge-Advocate Holt in 1862 throws no light on the subject, nor does the first edition of the little volume by Pittinger, who was one of the raiders and who, in 1863, wrote his account of the expedition. Years later, he revised the edition and gave the name of the locomotive as the "General," which, however, we have every reason to believe was not its original title.

In 1864, a government photographer who had secured a picture of the famous locomotive, went on record as stating that its name was the "Hero," and so he labeled the print I am sending you. Why he should have misstated the name, if it was then the "General," is not easily understood, as, like other members of the army, he was presumably employed to depict the facts as he found them.

Therefore, the earliest appearance on record of Andrews's engine is under the name of the "Hero."

The solution of the difficulty probably lies in assuming that the damaged locomotive of the picture, after the departure of the Federal army, came again into the possession of the Western and Atlantic Railroad, which overhauled it, rebuilt the damaged portions, and set it to work, substantially a new engine, under the name of the "General." It is reasonable to believe that the earlier title soon faded from men's memories and it came to be known by the name it now bears. This hypothesis will explain why the appearance of the "Hero" is so different from that of the "General."

The former, with its supplementary frame, clearly belongs to the *ante-bellum* type sent out about 1855 by various locomotive builders such as Hinkley, the Taunton Works, and others, while the latter is of the *post-bellum* type.

However all these things may be, I am nevertheless very glad that the "General" has been preserved and set up where it can be seen by all travelers who pass through Chattanooga, for it conveys to this and future generations an example of the trim and beautiful machines of bygone days.

Respectfully yours,
I. S.

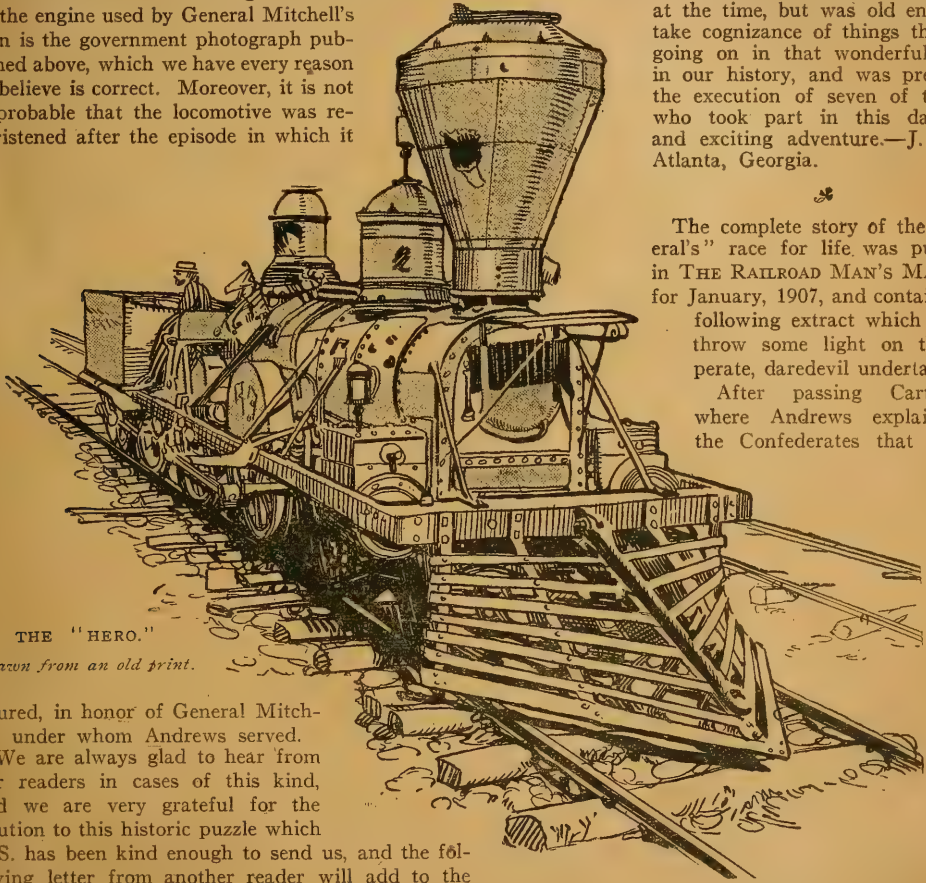
As I. S. states, there is little doubt that the "Hero" and the "General" are one and the same, as the first record containing the name of the engine used by General Mitchell's men is the government photograph published above, which we have every reason to believe is correct. Moreover, it is not improbable that the locomotive was rechristened after the episode in which it

The pursuit was continued on the "Yonah" until Kingston was reached. At that point, the line was occupied by other trains, the "Yonah" was abandoned, and the "Alfred Shorter," a locomotive belonging to the Rome Railroad, was pressed into service, and used in pursuit as far as Adairsville; there the "Texas" was secured and used to Ringgold, where the "General" was recaptured, Andrews and his men having abandoned her at that point and dispersed in various directions, only to be captured in the next few days.

The writer was only a small boy at the time, but was old enough to take cognizance of things that were going on in that wonderful period in our history, and was present at the execution of seven of the men who took part in this dangerous and exciting adventure.—J. T. D., Atlanta, Georgia.

The complete story of the "General's" race for life was published in THE RAILROAD MAN'S MAGAZINE for January, 1907, and contained the following extract which helps to throw some light on the desperate, daredevil undertaking:

After passing Cartersville, where Andrews explained to the Confederates that he was



THE "HERO."

Drawn from an old print.

figured, in honor of General Mitchell, under whom Andrews served.

We are always glad to hear from our readers in cases of this kind, and we are very grateful for the solution to this historic puzzle which I. S. has been kind enough to send us, and the following letter from another reader will add to the controversy:

EDITOR, THE RAILROAD MAN'S MAGAZINE:

In your June issue, you have an article signed "D. P.," Nashville, in which he refers to a communication in your April number from "I. S.," with reference to the locomotive "General," that was captured by the Andrews party in 1862.

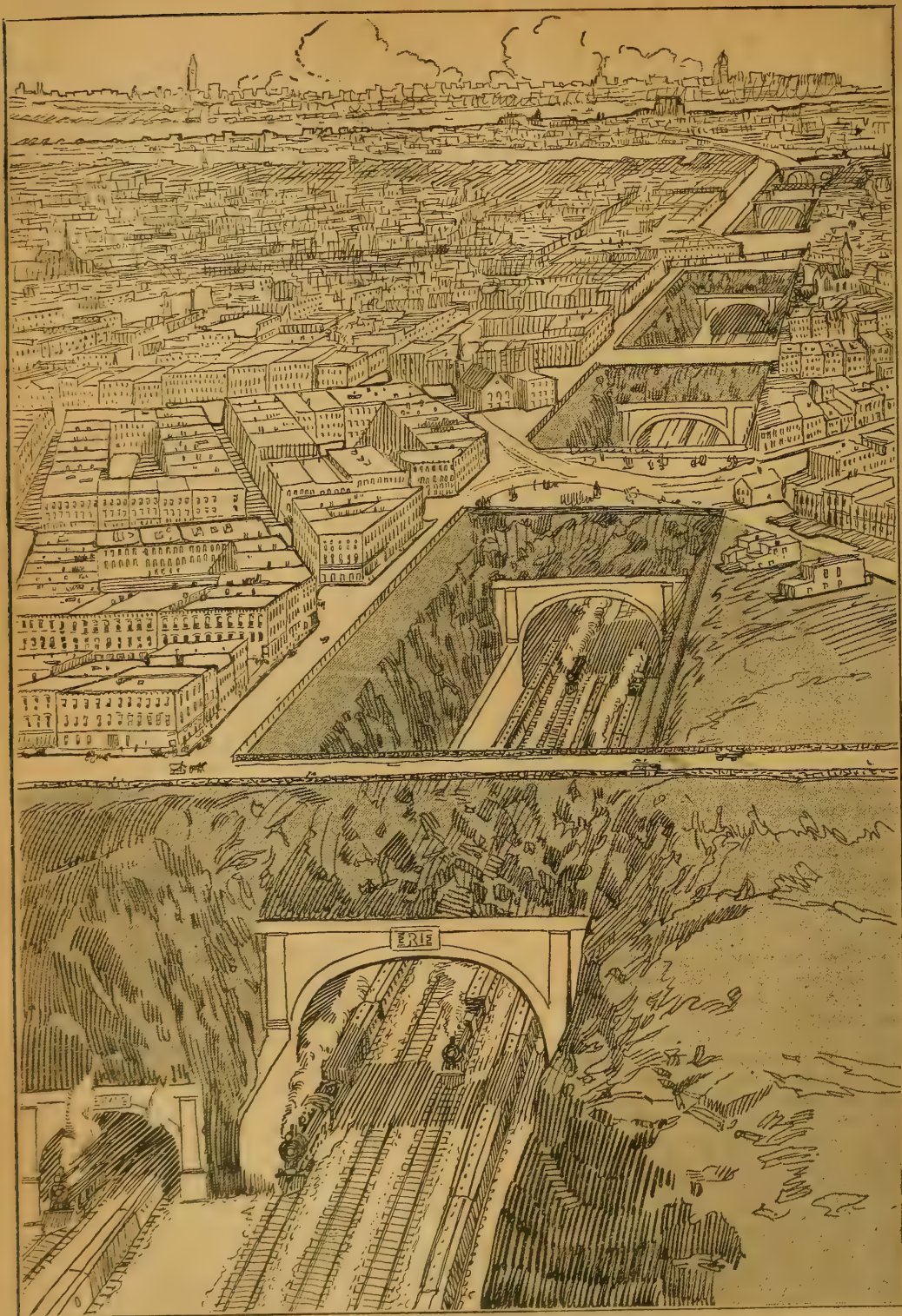
It is very evident that neither "I. S." nor "D. P." knows enough about the incident to enable them to give a true history of the case.

The writer was a lad living in Atlanta, Georgia, at the time, and remembers the case as clearly as if it had occurred only yesterday.

Besides the "General," the captured locomotive, there were three other locomotives in the chase. W. A. Fuller, who was the conductor of the train, began the chase on a hand-car, and continued on the hand-car until he reached Etowah, where he found and seized the old locomotive "Yonah."

carrying powder to General Beauregard, they had several close calls from being discovered, but it was not until they reached Adairsville that the chase really began, when a shrill whistle split the air from behind, and Andrews saw faint white puffs of steam against the sky to the south. Then followed a series of hair-raising episodes which have never been duplicated in railroad history. Car after car was uncoupled and dropped back to impede the progress of the pursuing locomotive, trestles were set on fire, cross ties were dropped on the track, but all to no avail.

"Fire your car!" shouted Andrews to his men, who had now taken refuge in the baggage-car, the last remaining. A fire was lighted and the burning car was left standing in the middle of a bridge while all hands climbed on the tender of the engine."



THE CUT MADE BY THE ERIE RAILROAD THROUGH JERSEY CITY, NEW JERSEY, AND COMMONLY CALLED "THE BERGEN CUT." IT IS THE DEEPEST EXCAVATION EVER MADE. OVER 600,000 CUBIC FEET OF EARTH WAS ELASTED OUT IN ITS CONSTRUCTION.

The Greatest Railroad Cut.

BY PETER MULLIGAN.

EVER since the Erie moved its terminal from Piermont, New York, to Jersey City, Bergen Hill has proved the one great stumbling-block in its path. With only a two-track tunnel through this giant barrier to carry the stream of traffic, the Erie, for many years, lost millions of dollars because of its inability to handle sufficient trains to meet existing conditions.

At length, its adamant enemy of solid trap-rock has been conquered, and the Erie has thrown aside its bonds. The rocky hillside of Jersey Heights has been torn and riven for many months, so that the deepest cut ever dug might open the way for four more tracks. The cry of the commuters has been stilled, and the Erie has accomplished one of the greatest engineering feats in history.

**How the Angry War-Cry of a Number of Commuters, Begun Six Years Ago,
Resulted in One of the Most Gigantic Railroad
Feats Ever Recorded.**



ANGRY commuters on the Erie, six years ago, used to write indignant letters to the railroad, denouncing it for suffocating its passengers in the Bergen tunnel, just outside Jersey City. The commuters were in earnest, but sometimes their letters were unconsciously funny, and the Erie, in a spirit of jest, used to print them on its time-tables.

For a railroad to joke in such a manner made travelers scratch their heads and wonder. The idea of a railroad having a sense of humor was beyond them. To the public a railroad is, and always has been, a vicious, soulless system, absolutely incapable of a joke; but here was a railroad that was poking fun at itself!

If the public had only known, the Erie's humor was double-edged. It had already planned a unique construction to do away with the nuisance, and it could well afford to take part in the fun. Now that this work is completed in the form of the new combination cut and tunnel through the heart of Jersey City Heights, it is time for the railroad to have its second laugh. Even the

commuters smile now as they roll through it, with only four shadows passing over them—tunnels so short and so high that they could be passed off as viaducts if it were not worth while remembering that they are the widest tunnels in the world.

The cut, or tunnel, or whatever you wish to call it, is the greatest achievement of its kind in this railroad age. It has taken four years to complete, working under conditions that required a strict and careful use of dynamite, and has cost the Erie more millions than it cares to talk about.

Previously the trains leaving Jersey City plunged into a tunnel more than half a mile long, in which gases from the coal-smoke were so thick that they ate out the rails every six months.

A Change for the Better.

To those going on long journeys the incident of the tunnel was forgotten as soon as the windows had been opened again, but to commuters, who had to travel through it twice every day, it was very unpleasant.

Now, however, the trains mount an ele-

vated steel causeway on leaving the depot, and are soon swinging out on one of four tracks far above the other railroads that criss-cross within the narrow strip between Bergen Hill and the North River.

Before the passengers are aware of it, they are running at high speed in the deep cut between the freshly blasted walls of rocks.

In quick succession the trains seem to pass under a series of broad bridges. There is no smoke; it is unnecessary to illuminate the cars. By the time the passengers have craned their necks far enough to see the top of the cut, they have passed through the only tunnel on the road between New York and Chicago.

It all happens so quickly and smoothly that it is very easy to pass directly through this engineering marvel without paying any attention to it. I was in the cut after the trains had been using it for a week, and, although dozens passed, I noticed very few passengers looking out of the windows.

It was already commonplace to them, but if they had been down on the track, as I was, listening to A. L. Moorshead, the resident engineer, telling the story of the cut, they would very likely have acquired a new interest in it.

Perhaps I was particularly impressed because I came upon it suddenly and unexpectedly. I had been walking through the busy streets of Jersey City, listening, without really understanding much, while Moorshead talked. When he stepped off the street without warning at the end of a board fence, I followed, expecting a walk of some distance, but fetched up within ten feet at the head of a steep, rickety flight of stairs that led down a sheer precipice almost a hundred feet deep.

A Man-Made Chasm.

Below was a vast hole several times as long as it was wide, that had been blown in the solid rock. It was enormous. A quarter full of water, it could easily have floated and hidden from the street several battle-ships. Later I discovered that it was one of the smallest of the cuts.

Just beyond was one deeper and longer, and on either end were others much longer but not quite so deep. None looked so big to me, however, as I started down the rickety steps.

At the very brink of the precipice was a brick smoke-vent. The side nearest the cut had been exposed for many feet. Moorshead explained that it was connected with the old tunnel.

"Here," I asked incredulously—"right alongside the cut?"

"Yes, and almost under it," he explained. "At most, there is only eighteen feet of rock between. That is why it was such a job to make this cut and blow out the tunnels. Dynamite goes down, too, you know. I tell you, we needed good men, and we had them."

The original intention of the Erie had been to blow a cut straight through Bergen Hill, regardless of expense, but it proved to be impossible. The hill was covered with houses, and was crossed by a number of important thoroughfares, including the Hudson Boulevard. It would have meant the tying up of all traffic except for occasional makeshift bridges, and this Jersey City refused to permit.

Blasting Down to the Old Tunnel.

So it became necessary to blow the cut without disturbing the streets above it, which could be done in only one way. This course was finally decided upon, in spite of the gigantic expense involved, and four of the main streets were left untouched, while the tunnels under them were blasted.

Walking back and forth in the tunnel, as he directed the men, Moorshead explained to me how the work had been accomplished.

The hill was attacked from many points at once, and holes were immediately sunk sixty to eighty feet to get the slow tunnel work under way as soon as possible. The first peckings did not amount to much, and the populace of Jersey City Heights walked from one hole to another with undisguised contempt. But before long there were dynamite shocks that brought in some of the householders with claims for fallen plaster.

Then came the huge derricks beside the holes to lift out rock in pieces weighing tons, and improvised tracks for work-trains. From that time on, to the people of Jersey City Heights, it was merely a matter of how much deeper the holes were going to be; but to the men on the job there were other troubles.

Cold figures give only a partial idea of such an undertaking. The cut completed is forty-four hundred feet long, with a road-bed fifty-eight feet wide, making the road-bed in the tunnels wider by eight feet than in any other railroad tunnel. The next widest is the tunnel under Tenth and Eleventh Avenues, leading from the tubes under the North River into the Pennsylvania Railroad depot in New York City.

Altogether there were removed five hun-

dred thousand cubic yards of blue trap-rock, one of the meanest kinds of stone to handle, and one hundred and sixty thousand cubic yards of dirt. To do this required two hundred and fifty thousand pounds of dynamite, and, when it was safe, charges containing as high as one hundred and fifty pounds were exploded.

In sinking the original line of blasts, the holes were all on the far side of the proposed cut, as remote as possible from the old tunnel, which was in constant use. The nearer the work approached the old tunnel, the more careful it had to be done. Its progress was slower and infinitely more difficult than if there had been no old tunnel to worry about; but the tunnel was there, and a single piece of rock dislodged from its roof might mean a bad wreck. There were often heavy blasts almost over the tunnel, but it was never seriously disturbed, however, and the trains ran through it in safety.

To know just how much dynamite could be used without endangering the tunnel was one of the most important problems that the builders had to face. Many men had a hand in this, but the one who did the most painstaking work, and did it without causing trouble, was John F. Smith, the grizzled old blasting inspector, known to every railroad contractor in this country.

Some Fancy Blasting.

He did the same work on the smaller Lackawanna cut, which passes into Bergen Hill at the west end of the Erie cut, and can tell offhand, by the look of the rock, just how much powder it will stand, and how far the shock will carry. His information on all things relating to blasting is wide and exact, but he needed every bit of it when he was clearing away rock by the ton within twenty feet of the roof of the old tunnel.

If the tunnel had been higher than the cut, there would have been less trouble, but with the tunnel lower, and the downward shock from dynamite, even with the greatest care, some rock was bound to become loose in the roof of the tunnel. To see that this did not cause trouble required constant attention.

The dynamiting periods were selected to correspond to the times when there was the least traffic, and what little traffic there was had to be hastened, or delayed until after the roof had been inspected. Such periods on a busy road were, of course, short, which somewhat complicated matters.

Trouble was generally expected opposite

the points where the blasts had been fired, and warning was always sent before the blasts were exploded, indicating the exact position of the blasts. For this purpose the smoke-vents served as excellent guides, as they could be seen plainly and at once both from the inside and the outside.

Death Lurked Overhead.

As soon as a blasting period arrived, the loads were immediately exploded, usually before the smoke from the passage of trains had had time to clear from the tunnel. Quickly following the shocks, a car, fitted with a raised platform that permitted careful inspection of the roof and walls, was pushed into the tunnel by an engine which always stood ready.

Of all the jobs connected with the building of the cut, there was none of a more death-defying nature than that of the men who manned the inspection car. They went in regardless of the smoke, and, being near the roof, got the full benefit of the accumulated poison. Working under extreme conditions, such as most men could not stand, they invariably discovered all the larger loosened rocks and removed them.

A strong search-light that pierced the gloom aided in the work. Occasionally a rock was picked off the track or from the roof, from which it would have been dislodged by the first passing train. Each time it was as if a wreck had been averted—and, as all engineers know, a wreck in a tunnel is one of the worst things that can happen on a railroad.

The emergency crew, however, could discover only the apparent faults caused by the blasting, although their ears aided them as much as their eyes when tapping the roof. Between blasting periods, meanwhile, there were long stretches when the tunnel reverberated with the passing of trains. At such times there was always the danger that a piece of rock whose looseness could not be detected would be dislodged by the jar and fall either between trains or on top of one of them.

Keeping the Tracks Clear

During the four years that the work was in progress the fear of this danger never ceased, but there were other and even more elaborate precautions to give warning the moment a piece of rock fell.

Extra track-walkers were hired and were so thick in the tunnel that all could have

escaped injury only by a miracle. In fact four were killed, but even at that they were not thick enough to see every piece of rock that fell, and, to aid them, fine wires were strung through the tunnel to give warning. Each wire was part of an electric circuit covering the roof for a few hundred feet, and even a small rock falling through it was reasonably certain to strike a wire, snap it in two, and break the circuit.

The moment the circuit was broken a red light flashed at either end of the section it covered. The track-walker nearest, seeing the red light, ran forward, removed the obstruction, and the trains passed through untouched. The work was so thorough that only one piece of rock hit a train, and it weighed but three pounds.

The cuts were not difficult from an engineering standpoint except as they related to the old tunnel, but the four short tunnels were a much harder problem to solve. In the cuts it made no difference how the rock acted, as the chief point was to blow it to pieces, but in the tunnels it was another matter, because the tunnels are so wide.

The tunnels, which resemble great viaducts, were all started on the far side from the old tunnel, and once inside the drillers worked much as they would have in mining, drifting and clearing out the rock above and below them. As they went they also timbered, except in the case of the second tunnel, which was cut through one piece of rock so solid that it was not necessary to support the roof in any way until it was time to lay the concrete.

Among the engineers there was some dispute as to whether this should have been done, but there appeared to be so little danger that those who were for speedier work outvoted the more cautious ones, and it so happened that no one was hurt. After the concrete was all in place there was in the case of each arch a free space of fifty-four feet through which to run the four tracks and allow space for the third rails to be used when the road is electrified.

When Tony Cried.

On the fourth tunnel, however, is the one piece of unsuccessful work on the whole job. Approaching it on foot from the east, can be seen a solid wall of concrete fifty feet high, reaching from the top of the tunnel arch to the street above. It stands where all can see. Above the other tunnels there are jagged walls of rock, but in this case the

smooth surface of the concrete tells another story. At this point the rock did not hold. I asked Moorshead about it, and he explained.

"In laying the concrete of the arches," he said, "we knocked out the central pillars we had left up to that time, and a small portion was always unprotected while the concrete was setting. In this case we proceeded as usual, but just above the last section on this end of the tunnel was a mass of rock ready to fall the moment the supports were knocked out. It hung like the inverted key to an arch, and the moment the supports were gone it came down, bringing part of the street with it.

"It gave us a few days' warning, and we put the best man we had on the job, an Italian we call Tony; but he couldn't save it. It was like calling in the doctor when a patient is almost dead. For all that Tony could do, it fell, and when it came down he cried."

A Human Earth-Worm.

This last statement was pretty strong. We had just been passing through crowds of drillers and blasters at work "skinning down" the surface of the cut, and I had not seen one who looked as if he might cry under any circumstance. They were hard men, used to cruelly hard work, and human life to them meant little. To be told that one of them was capable of weeping because a few tons of rock came down was difficult to believe, but Moorshead stuck by his statement.

"What's his real name?" I asked.

"Tony is all the name I know," he replied; "but I know he can handle powder. We're coming to him now. He is at the other end of the cut, doing one of the most delicate pieces of work on the job."

Presently we arrived at the point where the old tunnel and the cut meet, and right on a sliver of rock between the two Tony was at work with his gang, blowing away about a hundred and fifty feet of it.

"Tony," Moorshead asked, "what is your right name?"

"Camillo Campanna," he replied, and then for the first time one of the most valuable workmen on the job was known by his right name to any one connected with the Erie, except, perhaps, some clerk in the auditor's office.

I looked at him closely, but his face was no more mobile than the rest. Yet he had cried when part of the tunnel came down.

"You've been at this work a long time, haven't you?" asked Moorshead.

"Yes," replied Tony, with an eager look in his face that betrayed the artist proud of his work. "I blew the Pennsylvania tunnel under Tenth and Eleventh Avenues in New York."

This is not the kind of artistic accomplishment that usually goes by the name, but to Tony these tunnels were the children of his genius.

His first big piece of work we also learned was timbering the big hole that was made in Forty-Second Street at Madison Avenue in front of the Grand Central Station when the Subway was being built in New York. This was work that required great engineering skill, but Tony, whose technical knowledge had all been obtained by actual experience in the earth, braced up the sides of the big hole so successfully that the street traffic went over it as usual, and the big buildings on both sides, the Grand Central Station and the tall Manhattan Hotel, stood undisturbed while the rock was blown practically from under them.

After such feats Tony could hardly be blamed for weeping when he saw an expensive accident that might have been avoided if he had been put on the job a day earlier.

Humoring the Commuters.

The work he was doing at this time was very delicate, if anything that deals in dynamite can be so called. The point of rock between the tunnel and the cut had to be blown completely away, and quickly at that, but traffic could not be disturbed either in the tunnel or in the cut. The blasts had to be fired between trains, with a leeway of only a minute or two to clear the debris from the track. I saw some of this work going on, and it was exciting. It took an artist like Tony to enter into the spirit of such an undertaking and do it successfully.

The need for hurry again was due to the commuters, as there was, so far, only a double-track in the cut, and the trains on the northern branches were still compelled to

use the tunnel. Their passengers, seeing the other trains using the cut, were envious, and loudly and vociferously voiced their complaint to station-agents, conductors, officials of the company, and the newspapers, so that it was necessary to still their clamor.

At this time it was late in June, and on the first of July the new and higher rates were to go into effect. On most of the suburban roads running out of New York there was a good deal of kicking, but the Erie was shaming its commuters into silence by exhibiting the cut it had made for them. This however, meant nothing to those who were still going through the tunnel; so, to put them in a happier frame of mind, their trains had to be run through the cut also before it was time to buy the commutation tickets for July.

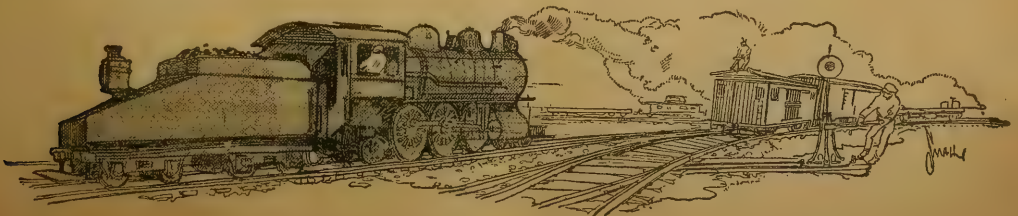
Cut Used by Six Lines.

Six big lines with many branches now run through the new cut. They are the main line of the Erie, the New Jersey and New York Railroad, the Northern Railroad of New Jersey, the New York and Greenwood Lake, its Newark branch, and the New York, Susquehanna and Western, which formerly used the Jersey City terminal of the Pennsylvania Railroad.

Just west of the cut the six divisions converge into three main stems. During the morning, when the traffic is the heaviest toward New York, each main stem has a track, and all the outgoing traffic is handled on the fourth track. At night, when the traffic sets the other way, the conditions are reversed. At such times there is the novel sight of three trains abreast, swinging along through the cut, where formerly they crawled singly in the darkness of the tunnel.

What impressed me more than the engineering wonder was the personal attitude of the men toward the gigantic task they had performed. As we walked along, Moorshead turned to me suddenly and said:

"I hate to see it finished. It's my child, and I can't bear the thought of it growing up, but it's through with me now, just as any child grows away from the control of its parent."



GETTING THE SUPER TO ST. LOUIS.

BY F. H. RICHARDSON.

Sandy McGuire Tells of the Time He Fired the 687 for Fatty Burns, and Made a Record.



“AY,” said Long Jim, who fired the 1051, after the usual gathering in the roundhouse had finished rubbering at the board, “any of you tallow-pots got wise to the little fairy at Lexington lunch-counter yet?”

“Haw, haw, haw! Ask Tompkins, over there,” replied engine 879’s scoup-pusher. “He ordered a wedge of lemon pie last night, and she fetched him a plate of beans. Tommy ate ’em every durn’d one, and never knew the difference! Fact! And when they got ready to pull out, the eagle eye had to go in and snake him through the door by the slack of his overalls, or he’d been there yet.”

“Well,” retorted Tompkins, “she’s a pippin, all right, all right, and I—”

“For Heaven’s sake, cut it out,” broke in one of the extra men. “You fellers give me a pain! Girls is all you can talk about. The whole bunch of you is blowing off steam half the time about some ‘pippin’! Why don’t a few of you fellers couple up to some of them?”

“Nix on the wedding business,” replied the steam-maker of the 755. “Nothing doing! Look at Bob, over there, looking like the original grouch that come out of the ark! ’Cause why? That’s easy? He done the matrimony stunt, and now the pippin he’s tied to takes his check away from him every pay-day, and gives him back forty-five cents—all for his very own, to squander just exactly as he pleases, provided he don’t spend it foolish.”

“Tain’t no such thing,” retorted Bob. “They ain’t no woman runnin’—”

The rest of his denial was lost in the laughter and guying that followed.

“Well, you tallow-pots can throw all the fits about that little yaller-haired shrimp of a gal down at Lexington you want to,” said

the fireman of the 1021 when the noise had subsided; “but lemme tell you the real, simon-pure, plush-upholstered Pullman palace-car of a gal is the one slinging hash and foundry pies down at Gaffney’s! She’s the—”

“Aw, for the love of suffering grate-bars, will you chumps shut up! Some of these times one of you’ll blow your dome-cap off carrying such a tremendous pressure of love for a piece of calico!” interrupted Sandy McGuire, who poked coal into the 687. “Did ye hear about the run me and Fatty Burns made last Saturday?”

“Naw,” replied the extra man. “I reckon it wa’n’t nothing startling at that! Fatty couldn’t get that old tub of an engine going more’n twenty-five miles an hour to save his neck!”

Sandy eyed the speaker with withering contempt.

“Couldn’t, hey? Well, I reckon that would be about right if *you* was firing her. He wouldn’t have steam enough to pull his own tank; but they happened to be a real man handling the scoup that day. A fireman, not a farmer—see?”

“Gwan, old man!” cried one of the crowd, who happened to owe Sandy half a dollar, and wished to keep in his good graces until he forgot it. “Give us the yarn!”

Sandy glared at the extra man, but, as he evinced symptoms of being squelched, contented himself with saying:

“Some folks always have to be tooting their whistle, whether they’ve got a noise worth making or not.

“It was this way,” he began, but stopped to borrow a pipeful from Long Jim. Then he filled his nose-warmer carefully, cleaned out the stem with a straw which he jerked from the office broom, and was puffing the smoke skyward when he continued:

"The super got a hurry-up wire to come to St. Louis, and, as both the day varnished-car trains had gone, he ordered out an engine and coach to take him.

"I dunno what it was all about, but it sure was some urgent, for he come near giving the yardmaster, the hostler, and a few others heart-failure gettin' things ready for the trip.

"The caller come after me on the run, and I thought sure there must be an earthquake chasing him. I never knew that fat slob to move faster than a walk before. The experience was so unusual that he just set down on my front steps with his tongue out and panted like a dog. When I got over to the depot there was the old mill all ready to start, and Fatty squirting oil onto things like he owned an oil-well.

"The hostler had the fire spread and steam up. The super was standing on the edge of the platform, watching for me, and begun to give hurry-up signals as soon as I come in sight, so I finished in a gallop.

"Say! we went down through the yards—well, I'll bet them old rails ain't had such a shaking up in years!

"That old scrap-heap I'm firing can sure split the landscape when you let her out; and I'll say this for Fatty Burns—he ain't afraid to ride!

"I actually believe if that man was straddle of a streak of lightning he'd be feeling around for the throttle of the thing to open it up a little more!

"We made a bluff at stopping at the Katy crossing, and come pretty near doing it. Anyway, we wasn't running more'n forty miles an hour when we went over the Katy tracks.

"Fatty was just getting her going good when the super come crawling over the top of the tank into the cab, and says to Fatty:

"What do you mean by running a crossing like that?"

"What crossing?" asks Fatty, so innocent.

"What crossing? Why, the Katy, of course!"

"Oh, the Katy! Well, I didn't quite stop, Mr. Haley, but we went over it very slowly," says Fatty, without batting an eye.

"The old man looked at him for a minute and sorter grinned.

"Say," says he finally, "I'm in a mighty big rush to get to St. Louis, all right, but I don't want to be scraped up with a hoe and carried there in a market-basket!"

"All this time Burns had her wide open, and we was ripping something of a hole in

the atmosphere. When we nearly got to the Renick coal-chutes Fatty asked how much coal I needed. I told him two tons. I didn't want to delay things trying to take all I could, and the tank was nearly half full already.

"Well, we made a flying stop at the chutes, and Fatty whistled for two tons. And what d'ye suppose that galvanized freak at the chutes did?

"Made a mistake, and stopped us at a seven-ton bin!

"Say, when I pulled that apron down, I thought sure I'd drawn a whole coal-mine. We had coal in the cab, coal on the ground, and the chute apron buried under about three tons of it!

"Was the super wild? Well, I guess yes! He was in the cab, and the two-legged curiosity up on top of the chutes couldn't see him, but he sure could hear what he said.

"The chap on top, who was responsible for the blunder, thought it was Fatty doing the talking, and he come back at him real prompt, calling him something like seventeen different names.

"The super never stopped to think that the feller didn't know it was him. He just made a flying leap for the ground, and fired that coal-heaver six times before he hit it!

"When the feller above got a good look and saw who it was he'd been cussing, he fainted and fell in a coal-bin—and that was the last we saw of him."

"I noticed there was a new coal-heaver at Renick yesterday," remarked one of the listeners.

"Yep. The old man fired him on the spot, and wired in a discharge at every place we stopped all the way to St. Louis. Besides that, he made us pull down and stop at the Renick depot, after we'd spent twenty minutes digging the chute-apron out of the coal, while he told the agent to have that chap arrested for trespass if he ever caught him within two hundred yards of the right-of-way.

"Well, as I said, we finally got the apron dug out, and for the next ten miles we must have paved the right-of-way with coal that shook off the top of the tank.

"One nice, big chunk, weighing about a hundred pounds, eloped just as we passed the Thompson depot, going something under a hundred miles an hour. It fell on the platform and busted into seven thousand pieces.

"I'll bet it's raining coal around there yet, and what glass there was left in the depot windows wouldn't fill a frame for a postage-stamp.

"At Mexico, we got orders to meet No. 3 at Montgomery, and the super remarked to Fatty that we'd lay her out ten minutes the best we could do.

"We will," was Fatty's comeback, and hanged if he didn't make good, too!

"Say! I've seen some running in my time, but from Mexico to Montgomery that day was a star number! Burns hooked her up in six inches and tried to pull the throttle out by the roots! He kept yankin' at it till I asked him if he didn't want me to take the lever back and lay it on the rear platform of th' coach.

"Run! I don't guess that old tub touched the rails more'n ten times in ten miles! She'd heel over to one side and go back with a slam that made the telegraph poles jump! The coal jolted down through the coal gate until there was about a foot on the deck, and the dust was so thick you could have cut it into chunks with an ax. I kept her hot for two miles by just opening the fire-box door and letting the dust suek in!"

"Aw, you couldn't 'a' done that, Sandy," exclaimed a wiper who was standing in the door.

"Couldn't, hey! Now, what do you know about it, you gangly-shanked greasy-waste slinger? Go out and mop some of the grease off one of them engines that ain't been really wiped in six months."

Sandy lit his pipe again and continued:

"Once I made a dip to put in a scoop of coal, and landed the whole thing up in Fatty's lap. He just grinned and said, 'That's all right, Sandy! It's the only place they wasn't any.'

"Honest, I could imagine I heard that coach crack like the snapper of a whip as we went around the curves. An' all the time Fatty set up there on his box with that old clay nose-warmer of his going like a volcano, as unconcerned as a kid in a perambulator.

"We didn't lay No. 3 out a single minute. The old man came over when we stopped at Montgomery for orders, and says to Fatty, says he:

"That was a great run, all right, Burns. What do you think this train is anyhow? A telegram?"

"From Montgomery, everything went all right until we struck Pendelton Hill. We was going down it some slower than a wireless, and shot around a curve near the foot of the hill to see a dago sectionman standing in the middle of the track, waving a red flag like he was tired. But when he saw how we was coming, he woke up real sudden and

churned that red flag through the air so fast he nearly set it afire.

"Fatty had put on the air as soon as he saw the flag, but when the dago got excited, Burns yanked the sand-lever open and put her over into the breeching.

"Say! You fellers know what it means to put an engine over when she's going something like seventy an hour! It's a wonder she didn't strip herself.

"Between the airbrakes and the engine, we sure made a record stop. It developed afterward that the super was rubbering out of the rear door of the coach when Fatty put her over. The shack told me that he wasn't sure whether the old man turned two somersaults or three, but for about three seconds he looked just like a pin-wheel.

"Of course, this performance didn't have a soothing effect on his temper, and he wasn't singing a comic song when he climbed down out of the car to ask that sectionman what was the trouble.

"What the blue blazes is the matter here?" he yelled, as he hit the ground.

"The dago saw who it was, and, jerking off his headgear, began bowing like a jumping-jack.

"Maka da rail in," said he, by way of information.

"What's that?" sputtered the super.

"Maka da rail in da track," submitted the son of Italy.

"He means they're putting in a new rail," says Fatty, who'd just got done looking over the rods and pistons to see if the terrific plugging she'd got had done any damage.

"Suppose they have a mile pulled up ahead."

"The super climbed on the pilot and told Fatty to pull down to where the gang was working around a curve, and, sure enough, they had two rails out.

"The old man was so mad when he saw it he couldn't wait, but jumped off the pilot and run on ahead.

"Who's boss here?" he yelled.

"A big chap with a smoky-looking face stepped out, removed his cap, and made his best bow.

"What do you mean by having the track tore up this way?" inquired the super.

"Maka da rail in," replied the general manager of the gang.

"You're fired!" shouted the old man, 'the whole bunch of you! Now get those rails in, quicker'n you ever did anything else in your life—you hear me?'

"The boss looked at the super and never

said a word. Then he said something to the men in his own lingo, and every one of them threw down his shovel and put on his coat.

"What are you freaks doin'?" yelled the super.

"You say you maka da fire," replied the boss. "All right, we go da home!"

"You what?" said the super.

"You say you maka da fire da whole bunch! What for we maka da work when you maka da fire?" continued the boss.

"Plainly the old man didn't quite catch the point, so Fatty stuck in his ear again.

"He means that since you've fired them they won't do any more work," he said.

"It didn't require the wisdom of no Solomon to recognize the fact that, with those two rails out, and the old man on a hurry-up to St. Louis, the dagoes had him where the hair was short. He seen the point too, real sudden, and come off his high perch, though it was plain he was near the busting point.

"Oh! come now," he said to the boss, "I was only joking! Get busy now and get those rails in in a hurry!"

"You no maka da fire?" asked the boss.

"Of course not! Come on now! Get a double-twisted push on, for you're laying us out, and every minute counts!"

"What he intended to do to that bunch, once the rails were in, wouldn't be hard to guess—but the dago wasn't born yesterday.

"All right," said the boss, "you no maka da fire! Now we quit!"

"At this piece of information the old man jus' sorter exploded. He called them guineas—everything but their right names. I actually thought he'd pull out one of the spikes an' eat it, he was so mad. He charged

up and down the track till it looked like a farmer had been plowing it; but it didn't do any good, for them apostles of labor just sat down on the bank and let him rave till he was done.

"And you couldn't guess in a thousand years what they made him do before they put them rails in.

"They actually made him cough up five dollars to every one of 'em, and promise that he wouldn't fire a single man of the bunch!"

"He didn't stand for all that, did he?" asked Long Jim.

"He certainly did! If he hadn't, I reckon we'd been there yet.

"I lost some of the fun, though, for I got down behind the boiler-head out of sight and nearly bust all the buttons off my clothes laughing. Fatty stayed down with the super, but his face was the color of a boiled lobster, and I could see him shaking with bottled-up laugh. He had to keep his face sober as a deacon's. Honest, if he'd even smiled, I believe the old man would 'a' brained him with a spike maul!"

"The super kept his word with the dagoes, though. He didn't fire one of 'em.

"He had the roadmaster do it! There's several ways of skinning a rabbit, I've observed!"

"Well, we finally got by that mixup—and talk about running! The track was clear for us, and we never even slowed up for Ferguson Junction. I'll bet th' dust ain't all settled around there yet.

"We didn't have no more trouble, and I reckon it's a good thing we didn't. The super had about all that one ordinary man is calculated to stand in one day, without bustin' his boiler entirely."

A TROLLEY-CAR'S LONG TRIP.

ACROSS five States and return, a distance of over one thousand nine hundred and ninety-four miles, is a trip which few trolley-cars can boast of having made, but such was the actual run accomplished by one of the regular cars of the Oneida Railway Company, of Utica, recently, which traveled from Utica to Louisville, Kentucky, and back in fourteen days.

The car kept to its schedule of thirty-eight miles an hour throughout the trip, and not a single mishap marred the long journey which officials of the Oneida Railroad and citizens of Utica participated in to learn something of the railway development of the Central States.

The cities of Detroit, Indianapolis, Ft. Wayne, Toledo, Buffalo, and Syracuse, were all passed

through on the long journey, and the lines of twenty-six distinct electric corporations were passed over in making the trip.

At one place, where no connection existed, it was necessary for one road to lay a temporary track over to the other to allow the car with its passengers to be transferred to the other line. Over all but four miles of track the car traveled under its own power, that distance it was towed owing to a difference in voltage.

The car was the regular type equipped with four seventy-five horse-motors, and the trucks were fitted with three-inch flanges, while the inside of the car was fitted with wicker seats instead of the regular seats used in the ordinary passenger service.—*Popular Electricity.*

THE MAN WHO WASN'T GAME.

BY WILLIAM S. WRIGHT.

While a Prisoner in Paradise, I Meet
the First Woman I Ever Loved.

SYNOPSIS OF PREVIOUS CHAPTERS.

JOHN ANDERSON, at the age of thirty, down and out, relates his experiences and hardships. At the age of twenty-one, resenting a reprimand from his father, he ran away from his home, taking with him twenty dollars which he had received from his mother to make some purchases in a near-by town. Arriving at the city at night he lands in a miserable hotel, where he pays ten cents for a bed. Here he meets a man calling himself Billy Brown, who immediately adopts him as a pal, taking him to breakfast the next morning and telling him he can put him next to a good job in the evening. Billy is recognized on the street by some detectives as Red Pete, wanted for a bank robbery, and in the succeeding chase he is shot. John Anderson is arrested as his accomplice. On the avowal of Red Pete that he is not his pal, Anderson is released the next day, but notified to leave town within twenty-four hours. Concealing himself under a seat of a passenger-train, he rides to a small town in western Nebraska. On being discovered by the conductor, he is put off, after receiving harsh treatment at the hands of some of the passengers. Here he is arrested as a tramp by the town marshal, but is speedily freed by the squire, who generously gives him ten dollars, recommending him to go to the village hotel for the night. He is grudgingly given a room, and during the night is awakened by a hand at his throat. A robber, who had witnessed the changing of the squire's bill at the desk that evening, has entered his room. The robber escapes and our hero is again penniless. The owner of the hotel befriends him, giving him a job in his kitchen, where he stays until he has sufficient money to take him to San Francisco. After several days' fruitless search for work, he finally lands a job in a stable, but early one morning is shanghaied and finds himself in the hold of a ship outward-bound. The ship is the Molly O. Malone, bound for some port in China, where, after loading on coolies, she will sail for the South Sea Islands. Anderson discovers that a sickly lad of seventeen has been kidnaped along with him, and he decides to befriend the boy. A brutal second mate forces the boy to work but he is too feeble. The mate kills him with a blow. Anderson makes such an exemplary sailor that he wins the friendship of the Swede, who divulges the mission of the Molly O. Malone, offering him a share in the forthcoming slave trading. Anderson seemingly agrees, but is merely biding his time, hoping to avenge the death of the lad. Nearing an island, he induces a quarrel with the mate, fells him, and jumps overboard and swims for land. After a few futile attempts at shooting, the captain and mate sail away and Anderson finds himself on a coral reef, about a mile away from the mainland. He attracts the attention of the natives, who rescue him, give him water, and imprison him in one of their houses.

CHAPTER X

In Paradise.



THE next morning I was released from my temporary prison where, I must admit, I enjoyed one of the most peaceful nights that had befallen me since I set out on my adventurous career.

Several times during the afternoon and evening my swarthy keeper brought me fruits a plenty and cooked meat, baked breadfruit—a most delicious substitute for bread or

potatoes—and a dozen or more cool young coconuts.

These he showed me how to open whenever I might be thirsty. They are the staple and ever-ready drink of the isles of the tropical zones. No matter how hot the day, how blazing the sun, these well-filled cisterns of nature are ready for the parched, and their liquid interiors are always as cool as if iced.

My keeper seemed to be of the kind-hearted sort. He could not speak English, but by signs we managed to make each other understood. He wanted me to eat and drink and be comfortable—and so I had no fear.

Began in the July Railroad Man's Magazine. Single copies, 10 cents.

When he went for the night I ate and drank to my heart's content. At length, the light that at first came streaming through the little window near the thatched ceiling began to grow dimmer, and soon it faded into darkness.

Then there was nothing left for me to do but recline on the mat on the floor and lay my head on the pillow of weeds.

I used to think that the old bed of my boyhood home was soft and comfortable; but this was indeed the most restful couch on which I had ever placed my body. It may have been that I was exhausted, but that tropical bed was like one of the couches that we read about in the "Arabian Nights."

When I awoke it was broad daylight. I stretched myself, rubbed my eyes, and looked about me for a few moments.

As if by magic, the bolt on the door clanged, and my keeper entered and greeted me with a hearty good morning.

He beckoned, and I followed him outside and down the pathway to a swiftly flowing stream, some twenty yards to the rear of the house in which I had been imprisoned.

He stood on the bank for a moment; then, stripping himself entirely of his scant clothing, signaled me to do likewise.

While I hesitated he plunged into the water in a well-poised dive. I could see his bronzed body as he swam under water, darting swiftly ahead by the wonderfully artistic strokes of the island swimmer.

He came to the surface and smiled. In a moment I had thrown off my clothing and had made a dive into the cooling stream. I splashed and plunged. I darted and I dived again—and the water acted like a tonic, for my blood was soon tingling through my veins.

In fifteen minutes or so he signaled that our morning bath was to come to an end. We emerged from the water and dried our bodies in the sun. When I had dressed, my kindly keeper took me by the hand and, muttering some native words, led me back up the path and onto what appeared to be the main road.

This road was lined with great, tall trees not unlike the elms of our own New England in shape and leaf, save that they were covered with gigantic scarlet blossoms, which, mingling with the bright green of the leaves, made one of the most glorious pictures that nature had ever created.

These great trees formed a natural arch over the road, shutting out the hot rays of the tropical sun and keeping it cool and inviting. They arched so high that, as we walked along, I was unusually impressed

with the largeness of the things that grow in the soil and the smallness of man.

We plodded along for a mile or more through a beautiful country. There were fertile valleys all about, it seemed, in which all manner of wonderfully flowering plants were blossoming amid what seemed to me to be well-kept plantations.

Here and there were the low coconut-thatched dwellings of the natives. To the right rose the peaks of the mountains until they were completely lost in the clouds, and on the left the bluest ocean I had ever seen rested without a ripple as the sun glinted over its surface.

What a beautiful place in which to live, I thought.

We must have gone some distance beyond a mile when my guide and keeper turned off the main road and into another more narrow and shorter that soon led to a gate.

This gate opened onto a garden of myriad flowers, strange and fragrant. Along the pebbled path we walked, and finally stopped before a native house, thatched with the ever-useful coconut palms, in style and finish perhaps a little more impressive than any other I had seen that morning.

One step led from the ground to the veranda. As my keeper put his foot thereon the latticed door was opened by a beautiful young girl—as charming and soulful a creature as ever my eyes looked on, and she had come out to greet us.

And greet us she surely did. As she smiled, she showed the whitest of snow-white teeth, and her eyes lit up with a great wonderment. She held out her hand as she came toward me. I looked at my keeper, who had removed his hat, and was standing in an attitude of the most abject obeisance.

Instinctively, I took her hand and returned her greeting. She directed the way into the house. I entered and she followed. He who had been my custodian since I was thrown on these shores of wonder, bowed as if he had received his full reward for being a willing servitor, and went his way.

To my surprise, she spoke a broken English. It was very "broken," and she spoke it very slowly and with great effort—but I could understand her, and it was not much trouble to make her understand me.

She was very pretty. Her skin was a most delicate brown, her eyes were piercing black, large and luminous, and her white teeth, her long black hair, and her finely cut cameo features, at once attracted my attention. When she stood on her bare feet and

drew her loose-fitting gown around her I noticed that, like *Rosalind*, she "was just as high as my heart."

She called in the most silvery tones, and two maid servants entered. She gave orders which I could not understand, and they disappeared.

I was sitting on a wicker-seat, and she drew another close to mine. Then she asked me my name, and all about me and my adventures, and just how I happened to be cast up on the island of Moona—for that was just where I happened to be at that particular moment.

I told her as briefly as possible just what I had been through, and she listened with all the eagerness of a child.

Then I ventured to ask her name, and she replied, "Tati," with a long sound of the "a," which gave it a peculiarly pleasant musical tone.

She explained that she was more than Tati. Indeed, she was the Princess Tati, and her father, the old King of Moona, lived afar on the other side of the island, where he was maintained in limited luxury by the European government, which had once overpowered him and was now slowly turning the Utopia that his forefathers had created and handed down to him into the commercial status of modern civilization.

Tati was telling me that this was *her* house, that *her* grounds were outside, and all that nature brought forth thereon was *hers*, and *hers* alone. Frequently she went to visit her father and mother and sisters, and frequently they came to visit her. She loved her island home, she said, and cared little for the great lands that lay beyond its shores; and if all the men were like the officers of the regiments that policed the island—who never failed to insult her—then she was glad she was a daughter of the tropics.

While she chatted on, telling all about her island and the people, the maid servants entered with a tray of food and spread it on a cloth of green leaves, which they laid on the floor. These islanders never dined from tables.

There was a great dish of wild grapes, there was an omelet sprayed with some savory sauce, there was breadfruit in several forms, there were tiny fishes, and there were two bowls of the most savory coffee that I ever drank.

She sat on the floor in the posture known on our land as "tailor fashion," and bade me do likewise. I couldn't take the position as easily as she did, but I managed to make

myself comfortable, and she pointed to my bowl of coffee and bade me taste it.

"It is delicious," I told her.

"Now, try a fish," she said, always smiling.

She looked at me queerly as I lifted a morsel of the food to my mouth. It tasted unlike any fish that I had ever eaten.

"You don't like it," she said.

I was trying to decide whether I did or not, when she continued:

"It is raw fish. It is the dish that we like best in Moona-land."

The fish tasted better, I must admit, than the idea of devouring it before it had been put through the recipe of a chef. But Tati ate it relishingly, and explained as she did so that her people never cooked fish; that the waters of the sea were so pure and the fish so fine they were preferred raw. A sauce of lemon and grated coconut added to their flavor and destroyed the taste of oil in the finny one's flesh.

Before the breakfast had gone further I found myself reaching for another fish, and Tati beamed on me as I did so.

She was my friend; that was plain, and, realizing that, it was my turn to ask her some questions.

"Princess Tati," I said, "won't you tell me why I was locked up last night?"

"Were you not comfortable?" she asked in return.

"Quite," I replied, "but I must admit that at first I was a bit frightened. I didn't know where I was."

"Weren't you comfortable, and didn't you have a nice dinner?"

"I was very comfortable," I said. "I never slept better in all my life. And the dinner was splendid."

She looked at me coyly. Then she went on:

"I sent you the dinner, and—"

I interrupted her with a burst of thanks.

"I had you locked up," she continued. She hid her face, and her laughter was like the tinkling of bells.

It would have taken a hard-hearted wretch to have turned in anger on so beautiful a creature, even though she had made him a prisoner. That laughter would have dispelled any wrath.

"Tell me all about it," I said, laughing, too. "I am interested."

"Well, I'll tell you. We of the royal family of Moona have an old custom which the government that now rules us has never taken away. It is this: The princesses can lay claim to any strange man who comes to these

shores just as the princes can lay claim to the other sex."

She looked at me, wondering if I understood; and you, my reader, must remember that if I quote her in more perfect English than she really spoke, it is only to make plainer the wonderful simplicity and poetry of her thoughts.

"I heard the commotion when you were on the reef, and I ran down to the beach: I asked one of my servants to take some men in a canoe and bring you ashore. At first, I thought that you were some enemy, but when you stepped on our beach I could see by your face that you were a friend."

I blushed; and Tati blushed, too.

"I told my servant that I wanted you to visit me—oh, it has been a long time since a stranger has come here and we could put our old custom in vogue; and, as it was impossible for me to see you then, I told him to lock you in a little house that I own, down near the beach, and keep you there until morning."

"But why did you lock me in?" I asked.

"I was afraid you would get away," she answered with the artless look of one who has given a very good reason for having done something that is very foolish.

"I wouldn't have left here for days," I said.

"And you won't leave for days now, will you?" she asked rather appealingly.

I did not reply at first. I just sat and looked at this captivating creature—this child of a sunlit isle in a sunlit sea, who was more beautiful than any other girl in all the world.

I sat and looked at Tati, and a great power seemed centered in her face. Her eyes shone with a wondrous luster. Her lips parted—now they were playful and now profound. Her whole body was as languorous and supple as an Oriental's, and she seemed to possess a personal magnetism that was more than I could resist.

Here was a temptress!

Who would have dreamed that I, the prosaic John Anderson, soldier of fortune from far-away America, would be cast on a tropical isle and be seated in the presence of the princess!

I had heard of such romances in a vague way. I had read of them in books, and had discarded them as mere playthings to cheer a tired brain. I had been told of a fairy-land and all that was mystic, and believed it not—but here I was—homeless and penniless—ten thousand miles from the prairie, and a

princess was actually talking to me—and—tearing my heart out by the roots.

CHAPTER XI.

Our Talk in the Arbor.

SHE stood up and placed her hands behind her and moved—I cannot say walked—with the noiseless, gliding motion of her kind, to the veranda.

I arose and followed. She led the way down the path and through the flowers to a blossom-bedecked arbor.

"I will stay on this island," I said to myself as I followed her. "I will stay, and I will be her friend, and maybe more. And, why not? Am I not four and twenty, and fair and strong? Am I not free to go whither I please? Does she not show by her look and word that she is interested in me?"

Tati sat down, and I sat beside her. I always said "Princess," but now I asked that she give me permission to call her by her first name.

"Surely," she replied, "and I will call you *Merita tanoa*. That," she went on to explain, "is our native language for 'American man,' and I am going to call you by that name."

So, in our future talks, I was ever *Merita tanoa*, though Tati frequently cut it short by simply saying *Merita*.

I asked her age, I asked about her life, I asked for every bit of information that she could tell about her interesting self. She told me everything; and she told me, too, that she had never been in love, and she wondered if there were any one who would make her love as she wanted to love.

It might have been a confession on her part that she cared for me. Be that as it was destined to be—I knew that I loved her with all my heart.

"Tati," I said, "perhaps some one has come along who can make you love—but, I cannot swear. I do know that some one has come along who loves you with all his heart."

I drew nearer to her and took her hand. Her soft fingers closed on mine—I knew then that she would not refuse to hear me. I put my arm about her shoulders and drew her closer and closer. Her body thrilled, her arm sought my neck, her great eyes beamed with love and her lips trembled.

I kissed her.

She nestled close and whispered, "My *Merita*."

I kissed her again.

"Will you stay here always?" she asked.

"I shall be glad to," I replied, looking down at my tattered clothes, still bearing the grease and grime of the Molly O. Malone, which even the waters of the sea had been unable to eradicate.

"But what shall I do for clothes?"

"You shall dress like a native—and live like a native," she went on. "I will give you some of our men's clothing. It is far more comfortable than your clothing, and you will soon get used to it and like it."

"Oh, you are so good!" I told her. "But what shall I do for food? And I must work so that I can get money to live."

Tati laughed. The natives of Moona had but little regard for work. And why should one want to work, I thought, when the land gives him food without tilling and the sea and all else adds to his supply of visible wants?

"You will live here," Tati went on, directing my future as she pleased, "and we will go to my father some day soon, and he will give you a plantation, if—if—"

She was hesitating. She came closer. Her head was on my breast, and she trembled.

I put my arm around her to comfort her, and bent tenderly over her.

"If what?" I asked.

"If—" She hesitated again. "Oh, can't you guess?"

Indeed, I tried to guess. A dozen different things ran riot through my brain. Finally she looked up into my eyes. Her fear had gone.

"If you marry me," she said, and hid her face again.

"Then the plantation is mine," I answered.

She reserved a part of her house for me. Her servants put it in the best order, and laid on the floor the best mat she possessed; and placed thereon the very best willow-rest for my head.

That night, when I stretched out for rest, I went over the day's happenings to the minutest detail. I wanted to be sure that I had not made a prime fool of myself; I wanted to be sure that it were best to stay on that beautiful isle where all was peace and plenty, and I wanted to be sure that my lot lay there and not aboard some vessel that would carry me to more practical shores.

While I was thus musing I fell asleep. In the morning I was awakened by a rustling at my side, and there stood my old friend the native who had so carefully locked me up the first night of my "arrival."

I shall always refer to him as my "keeper"; and, although he told me that his name was Akipo, I generally said "Keep" whenever I spoke to him.

Well, Akipo bore the glad tidings of his august mistress and several pieces of cloth. The latter, I soon learned, were a small white shirt common to all lands, and a square of colored print about four feet each way.

This, Akipo explained by many a gesture, was the native garment, and that I was to wear it. He was dressed in the regulation way he showed me, and I examined his clothes and prepared to dress likewise.

The shirt was very easy to get into; it is worn the same way the world over—but the four feet square of print was something quite new.

Akipo took his off and put it on several times to instruct me. The scheme was to simply wrap it around the waist and tuck the edges into some sort of an impossible knot that would stay put until the wearer was ready to retire for the night.

Once fastened, the cloth hung from the waist after the manner of a skirt. I realized at once that it was a very comfortable form of dress for tropical wear, and it seemed to match my complexion and fill other phases of importance, but—I simply could not manage to tie that wonderful knot.

Whenever I donned the cloth and knotted it about my waist and walked about the room, it would come untied. Akipo patiently adjusted his a dozen times with the most marvelous dexterity. He showed me that that famous knot could not come undone if it were only fastened properly—and I believed him.

It took skill and endurance, however. I finally mastered it, and of all the surprises that have come to me since the day I swam ashore on this tropical isle, that knot was the most mysterious and the most wonderful.

Breakfast was almost ready, and Akipo made the knot for me. I was sure of it when he did the work, and when I appeared before the princess in my new garb, I feared no unseemly mishap.

Tati had the feast of the morning spread on leaves that she plucked herself from a shrub in the garden.

There was the raw fish and the fruit and the coffee; and this morning, in order to toast ourselves and our future, she had made the daintiest beverage of coconut water and limes and the essence of an herb that grew in her garden.

She poured it into a coconut-shell, and

wished me every joy as she drank. She handed the rustic goblet to me, and I wished the same as I quaffed to the depths. Then we drank again. It was a harmless beverage. There was no stimulant mixed in it to fire the brain and set the wits awry—it was a wholesome liquor and as pure as the brook, but it had the tang of the earth and the snap of a whip.

After our breakfast we went again to the little arbor where, the day before, I had held my princess in my arms. Within its cooling shade we talked again of our love and our future, and we planned that we should visit the father immediately and convey to him the good news.

"And he will give us his blessing," said Tati. "I know that he will be very, very happy."

I wanted to see something of the island, and Tati suggested that Akipo take me around in a carriage which she would supply for the purpose.

She sent him off, and we strolled about her grounds—a riot of roses and a sea of color—and she told me how dear it was to her, for it was her very own home, and not even the foreign government which ruled over the island could take it from her. She was chatting about each and every spot in her paradise, when Akipo returned.

He hailed us from outside the gate. He sat on the front seat of the most dilapidated conveyance that I had ever seen. It was once a victoria. The horse that was hitched to it was no better. He was so poor and thin that I was really ashamed to have him exert his strength by dragging me along the highway.

But Tati explained that this rig was once the conveyance of the British consul, who had sold it to her for a nominal sum when his government had given him something better.

"It is the best that we have on the island," explained Tati. "You see, we don't ride much here. Most of our traveling is done by water, and on land we prefer to walk. But Foya is stronger than he looks." She went up to the horse and patted his neck. He neighed as if he wanted to convey the same impression.

I asked Tati to accompany me, but she wanted to remain and prepare for the trip to her father's. So I jumped in and Akipo clicked to the horse. We were off at a leisurely jog.

I turned to my princess and threw her a kiss, and she threw a dozen in return. As I journeyed down the road I could see her in

the garden. She was the acme of happiness.

What I saw of Moona that day made me want to stay for all time. It was beautiful beyond description. No pen can ever completely picture its tropical splendor, no brush can depict its natural glories. It must be seen to be appreciated.

Everywhere the inhabitants were idling in the shade of their eternally leafy trees. Everywhere little children ran gleefully, as naked as the day they were born. Everywhere beautiful girls and stalwart men passed along with peace and contentment on their faces. Everywhere there was plenty and sunshine and the glory of a contented life.

No one seemed to worry. If there was trouble in that blissful place, it was afraid to show its head.

The fascination was supreme. The gripping force of its wonder held me with chains of steel. I would stay!

Akipo could only point with pride, but when we drove up to the little village where the ships were at anchor in the harbor and the populace was more thickly centered, he stopped at the door of a small cottage.

Sitting on the front steps was a middle-aged, squat individual whom I quickly recognized as one of my own countrymen.

Just why Akipo stopped there I cannot tell. I was sorry that he had done so, for the look on the man's face was anything but pleasant—in fact, he was the only fly in the otherwise clear amber of that paradise.

Perhaps Akipo did it from a sense of kindness, believing that I was anxious to meet some one who could speak my tongue.

The stranger looked at me sullenly.

I greeted him cheerily, saying simply: "How do you do?"

He did not reply. Then I said:

"I am sorry to have disturbed you," and I tried to motion Akipo to move on.

Akipo evidently did not understand. Then the stranger glared at me more and more fiercely, and said:

"How did *you* get here?"

I did not like his tone. There was fright and fear in his face.

"If you must know, I may tell you," I replied. "But you seem to resent my presence, so I will move on."

I nudged Akipo, but still he did not understand. My new-found friend arose from his seat and came to the carriage.

"What are you doing here, and where did you come from?" he asked again.

"Well, if you must know, I swam ashore. I originally came from the United States of America, but by such a roundabout way that it would take weeks to tell you. Are you satisfied now?"

"Then—then you are not a detective?" he gasped.

"No," I replied. "Most certainly I am not."

He breathed a sigh of relief and held out his hand.

"Thank heaven for that!" he exclaimed. "Do get out and come in—let me give you some refreshment."

He took my hand and pressed it warmly. I hesitated, but he insisted.

"Do—please do come in and talk to me

(To be continued.)

for a little while. It will be a godsend if you will. Please, oh! please, do!" he pleaded, and the tears came to his eyes.

"I have not spoken to a soul in English for so many years, and you are the first man from God's country that I have seen in a generation! Oh, do come in and talk to me, my friend! Have mercy on me, and stay a little while!"

The tears were pouring down his cheeks. His pleading and his predicament were more than I could stand.

I stepped out of the carriage and followed him into his humble home.

"What new sensation is in store for me now?" I said to myself as I passed his threshold.

A NEW DEVICE FOR CATCHING MAIL.

Clerks on Illinois Central Trains Can Now Gather in Two Bags Instead of One.

A NEW mail-catching device which not only delivers mail-bags to fast-moving trains, and receives them as well, handling two or more bags as easily as one, is being installed on the Freeport division of the Illinois Central Railroad.

The unique feature of the catching device is the buggy steel chain nets, which operate in the following manner: Attached to the outside of the mail-car is a square steel frame to which the chain net is attached.

This frame is made to swing on the hinges attached to sliding bars so as to permit the device to be quickly shifted from one side of the car door to the other, according to the direction in which the car is moving.

Attached to the lower outside corner of the frame is one end of an iron rod, with the other end traveling on a bar attached to the car side,

containing a set of spiral springs so adjusted as to bear by compression the shock resulting from the frame and net catching the mail-bag.

On the same outside corner of the frame, below where the rod is attached, is a hook or finger, for the attachment of the bags to be delivered.

The roadside device, which acts in conjunction with the one attached to the side of the car, is similar in all respects, except that the bags it delivers to the train are hung above the receiving net while with the car device the bags hang below the net.

The devices meet as the train rushes past, and the exchange is made, the force of the impact being absorbed by the slack of the chain net and the spiral springs. The reflex action of the springs throws the frames and the chain nets back with the mail-bags surrounded by the nets.—*Dixon Star*.

RAILROADING IN JAPAN.

THE trains used in Japan are built on the English model, the engines being much smaller than those with which we are familiar, and they are run on narrow-gaged tracks.

The coaches are divided into sections. Sleeping-cars and diners have lately been introduced. The sleeping-cars prove uncomfortable to Americans on account of the diminutiveness of the berths, as they are built for a small people, and those exceeding the size find sitting up more comfortable.

The diner has not proved a great success, as most of the trains stop from twenty to thirty minutes for meals. Natives meet the trains and sell to the traveler a small box of lunch for the sum

of ten cents. The lower layer of each box is of rice, and on top of that are vegetables, hard-boiled eggs, and fruit. The whole is wrapped in a large green leaf and placed in the box. Hot saki, beer, and tea may also be bought.

The guards of the train wear a blue uniform and are active, quick, and courteous.

The fuel is mostly wood, although some coal is burned. Owing to the size of the engine the speed of the train is not great, thirty miles an hour being the average time. The longest run in Japan is from Tokyo to Maji, a distance of three hundred miles. It takes two days and a night to cover the distance.—*Chicago Tribune*.

The Finish at Frazer's.

BY ARTHUR A. GREENE.

THE TRUE STORY SERIES. Men already in the shadow of the gallows are not apt to hesitate about adding a few more notches to their guns when they are cornered. Serving as a deputy peace officer often proves quite as hair-raising an occupation as thawing dynamite or chumming with a rattlesnake.

Situations often arise where it is a case of kill or get killed, and it is not to be wondered at if most deputy-sheriffs feel inclined to choose the former rather than the latter course. The experiences of the young lawyer who was sworn in to hunt down the Hugo hold-up men and was in at the death of the two unknown train-robbers surrounded at Fraser's ranch, is a tale of rapid rifle-play and of a bold strategy that came nearly causing the death of its author.

TRUE STORY, NUMBER FORTY-NINE.

Bullets Proved of Little Avail, but Sheriff Billy Walker Brought His Former Baseball Training Into Play with Fatal Results to the Train-Robbers.



FOR ten years, I have frequently wondered who we killed that day at Frazer's Ranch. If anybody who sees this should happen to know the name of the men who held up Union Pacific train No. 2, on the night of August 23, 1900, he will do me a favor and clear up a mystery.

I'm sure that various peace officers out West would like this information, also, for train-robbery is a crime against which the statute of limitations doesn't run, and there's still \$10,000 in rewards outstanding.

My personal opinion has always been that

the men belonged to "Butch" Cassidy's outfit, and that the redoubtable "Butch" himself directed the Hugo hold-up and escaped with his skin. That worthy still flourishes, and seems permanently secure in his stronghold up in the Routt country just below the Wyoming line, and he still fares forth and turns an occasional trick.

The West End averaged about one hold-up a month, somewhere between Pocatello and Salina, and the company was at its wits' end for some means of breaking up the operations of the gang which had its rendezvous in the wilds of northern Colorado.

Big rewards were posted, a big secret-

EDITOR'S NOTE: All the stories published in this TRUE STORY SERIES have been carefully verified by application to officers or employees of the roads or companies concerned who are in a position to be acquainted with the facts. Contributors should give us the names of responsible persons to whom we may apply for such verification, in order that fruitless inquiries may be avoided. This condition does not imply any lack of confidence in the veracity of our contributors, but is imposed merely to give greater weight and authenticity to the stories.

Series began in the October, 1906, Railroad Man's Magazine. Single copies, 10 cents.



THERE'S STILL \$10,000 IN REWARDS
OUTSTANDING.

service force maintained, and sheriffs all along the line were keen on the watch. The robbers, however, always made their getaway.

I was practising law and economy at Colby, a little cow-town in western Kansas, forty miles north of the Union Pacific and some ninety miles northeast of Hugo. I was young enough to be looking for trouble, and when, two days after, news of the robbery had reached Billy Walker, the sheriff, who swore me in as a deputy, I was game for anything.

My law office was across the street from Walker's livery stable. The nervy sheriff and I were chums, in a way. So when he came into my dingy little quarters, and in his deliberate way told me that he needed me in his business, I was ready on the instant.

"One of Frazer's men just brought me word that the fellers who stuck up No. 2 are rounded up at the ranch. I'm goin' to take you and some more of the boys out and git 'em. We'll start in ten minutes. There's a horse across at the barn for you."

Frazer's was some fifteen miles from town. It was a ranch known over four counties for its hospitality toward wayfaring cowmen who happened to be in its vicinity. The messenger who had just ridden in, brought word that two exhausted men, their horses quite "beat out," had arrived at the ranch early in the morning and demanded something to eat, feed for their horses, and a place to sleep for a few hours.

There had been no one at home excepting

the women folk; old Frazer and the hands were away working cattle in the breaks of the Smoky Hill.

With ill-advised bravado they proceeded to terrorize the women by telling them that they were the men who had held up the train at Hugo, that they wanted to take turns sleeping, and that the man on watch would shoot any one who attempted to leave or enter the house. On the other hand, if they were not molested and Mrs. Frazer and her two daughters made no effort to report their presence, they would be on their way as soon as night came and no harm would be done.

They had not counted on their exhaustion, however, and, after a hearty breakfast, one of them lay on a bed with his chaps and gums on, and his rifle at his side. He fell asleep almost at once, while his confederate sat with his back to the wall, his rifle across his knee, where he could command the situation in case of a show of hostility.

Thirty-six hours in the saddle and no sleep is going some, however, and soon the women, who had gone about their household tasks with an eye on their unbidden guests, noticed that the watchman nodded, and, presently, his heavy breathing told that he, too, was asleep.

It needed no ghost to come from the grave to tell these Western women it was time to "hike" with the news. After assuring themselves that the men really were sound asleep, they slipped out-of-doors and ran toward the big road which led to the nearest neighbors, four miles away.

A mile from the house, they met one of their own "punchers" returning to the home ranch for some branding-irons. Although he had ridden far and his horse was tired, he faced toward town and brought word to Walker.

It was just at the beginning of the beef round-up and the home ranches were practically deserted, the men all being out on the open range to the south. So it happened that when our little posse from Colby arrived on the scene, we were the only men in twenty townships.

The Frazer ranch-house was the familiar "soddy" still common on the plains—a low, one-story, rectangular affair, with few windows and a front and back door.

The walls were made of squares of buffalo-grass sod and the roof of pine boards, warped and checked by the blazing sun of that cloudless, rainless land. It stood three hundred yards from the corrals and stable, on the top of a small knoll, conspicuous in that limitless sweep of treeless prairie.

We had ridden as hard as our tough little broncoes could go, and covered the fifteen miles from town in less than two hours.

If our quarry had made the fatal mistake,

earlier in the day, of yielding to the demands of their exhausted bodies, they were sufficiently awake and alert when we arrived on the scene. We reined up at a point which we thought well out of rifle range. There were eight of us, including Billy Walker, who is the coolest man in the face of trouble I've ever seen.

We hitched our horses in the barn, not however until the reception committee in the house had kicked up the dust around us with their rifles, to let us know they were on the job and had plenty of ammunition.

Whenever I hear a man boasting that he doesn't mind being shot at, as I have heard men boast, I set him down as a prime prevaricator; for, believe me, that peculiar "splutt"—a sound which only a bullet striking soft earth can make—is calculated to give one some discomfort.

I was mighty glad to get down on my stomach in the grass.

Walker stood up long enough, however, to shout to the men in the house who we were and what we wanted. He ordered them to walk out in front of the house, put their guns on the ground and their hands up over their heads. He guaranteed that they would



WITH ILL-ADVISED BRAVADO, THEY PROCEEDED TO TERRORIZE THE WOMEN.

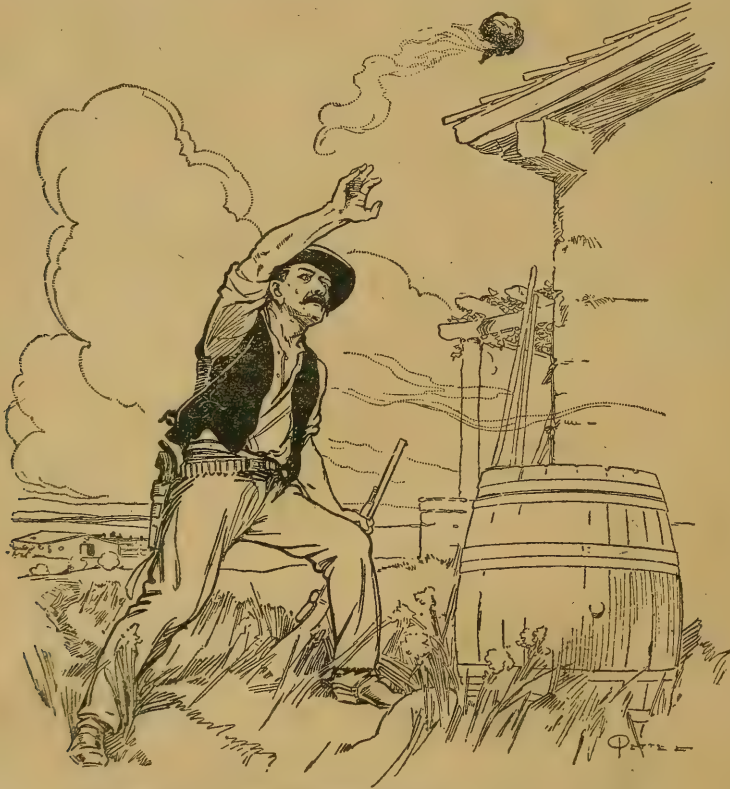
be put safely into jail and have a fair trial. They shouted back something which we didn't hear in the noise of the fusillade which accompanied their answer. We didn't know then that they had killed a man in the hold-up, and were surprised that they wouldn't listen to reason.

Train-robbery only meant twenty years at the most in those days; but, with a murder charge against them, it was not surprising that they were desperate.

We deployed around the house, returning the fire, which we directed at the windows and doors, in the chance of picking them off,

By this time it was noon, and the sun was blazing hot. Heat waves danced across the gray, baked prairie, and grotesque mirage shapes played tricks on the horizon. We had exchanged enough shots for a good-sized battle, but were far from results. Two more of our men were hit, one of them so badly that they would have taken him back to town for treatment, but the men in the house seemed no nearer surrender than they had hours before.

If we had "pinked" either of them, it wasn't apparent, for both seemed keen for trouble, and, at intervals, kept up fire. We



HE REACHED A POINT WHERE HE COULD TOSS A BLAZING BALL ON THE ROOF.

although we seldom caught a glimpse of them through the smoke.

Every time one of us ventured a little too close, drawing himself along inch by inch flat to the ground, he attracted their fire and found things mighty interesting. Jim Donelam was hit in the shoulder during the first hour. He was wounded, but he stuck, and wouldn't think of going back to town. Meanwhile the news had gone abroad, and we were reenforced by a half-dozen men with a taste for excitement.

hoped they would exhaust their ammunition, or get discouraged and surrender. They evidently believed that they could hold out until it grew dark, and then make a dash for liberty. It was a long chance, but they decided to take it.

The affair had taken on something of the semblance of a show. The whole county apparently had turned out to see the scrap, keeping a safe distance well out of range. On the outskirts was a ring of wagons and buckboards filled with excited women and chil-



HE STOPPED SHORT AND FILLED HIS RIFLE.

dren, and an occasional timid man to keep them company.

The afternoon was half gone when Walker called my attention to a depression barely a foot deep, which ran within sixty yards of the house. He had sent back to town for a quantity of waste used by the engine-wipers at the roundhouse. He was going to roll it into wads the size of a baseball, crawl up the swale close to the house, and, after touching a match to the waste, toss a blazing ball on the roof of the house.

"We've got 'em, good and tight, but they may stand us off for a week, for they've got grub and water in the house," said Walker. "There's no use prolongin' the agony, so I'm going to burn 'em out. You fellows keep popping away so as to keep them busy with their knitting, and I'll do the sneak up the draw."

It was a risky operation. When it came to throwing the fiery balls, Walker stood up and exposed himself almost at pointblank range. But that didn't stump him for a minute, although, to this day, as a result of his gameness, he limps.

The man finally arrived with the waste.

After giving the besieged another chance to surrender, which was answered by a volley, Bill Walker started on his perilous crawl up the shallow swale, with half a dozen balls of waste in the front of his flannel shirt. The rest of us covered his slow progress with a fusillade which did not lull for an instant. Our stock of ammunition had been replenished, fortunately, for we had been pretty liberal with it.

We kept one eye on Walker, who was making remarkably good progress along the five hundred yards he had to cover before he reached a point where he could toss a blazing ball onto the tinder-dry roof.

Fortunately the men at bay didn't discover what was going on until the tall form of the big sheriff loomed up within easy revolver range of the house. I stopped shooting, spellbound by the finest exhibition of nerve I've ever seen in my life.

Walker struck a match on the leg of his trousers. The wad of waste blazed for an instant, and then he threw it.

It fell short, but immediately he threw a second, a third, a fourth. By this time the men in the house were directing their fire

at him alone, and we could see one of them, outlined by a window, pumping his gun for all he was worth.

His foolhardiness finished him, for we concentrated our aim at him, and saw him stagger, clasp his hands to his head, and tumble backward.

His partner was using the ledge of another window as a rest, and was emptying his magazine like clockwork.

Jets of flame and smoke, at first hardly discernible through the heat mist, began to show on the roof. Walker's fire-balls were getting in their work. He was now down on one knee, his gun rattling like a Gatling.

We saw him topple over, and knew he was out of it.

The wind had whipped the flames until the whole house was ablaze. Then a man rushed out. He stopped short for a moment and filled his rifle, and then made a break for our lines, shooting like a demon as he came.

He didn't get far. When we reached his body he was still gasping, but he was literally shot to pieces, and died before we could pick him up. There was absolutely nothing

to identify him. We made a shallow grave near the burning house and buried him. Unless the coyotes dug him up, he's still there, with the secret of his identity secure.

The ranch-house was gutted, and the dirt walls collapsed. When the fire was extinguished the next day a few human bones were found in the ashes.

We took Billy Walker back to town, with a ball through his hip which left him a cripple for life. The last I heard of him he was still sheriff of Sherman County. The three others of our posse who were wounded pulled through and are still very much alive. The Union Pacific paid the ten-thousand-dollar reward, which was apportioned among us, and gave Frazer a check for the value of his house and what it contained.

Five men participated in the Hugo hold-up, killed an express messenger who resisted, and got off with several thousand dollars' worth of mail and express matter.

We got two of them, but the other three disappeared utterly. What became of the booty no one has ever been able to determine. Perhaps it burned that day at Frazer's, where the nameless outlaws found their finish.



PAT MURPHY'S EXPLANATION.

BY HERMAN DA COSTA.

Written for "The Railroad Man's Magazine."

PAT MURPHY was conducthor an-n 96,
fa-ast fr-reight.

Th' sup'rintindint wr-rote him: "You r-run
tin hours la-ate.

Th' pris'dint wr-rote the G. M., th' G. M.,
wr-rote th' boss,

An' now th' boss is axin me, ca-an Oi iexplain
th' loss?

It's u-up t' you, Pat Murphy. Wha-at hav'
yez got to sa-ay?

If you- don't give a good ixcuse, Oi'll fir-re
yez.

"Dear-r Sor," Pat Murphy answer-red, "Oi
no-otice Oi'll be canned

Unliss Oi wr-rite a good ixcuse, so ta-ake me
pen in ha-and.

We ha-ad six car-rs uv pe-eaches; a suddint
stor-rm set in-n.

Th' li-ightnin' stroock thim pe-eaches, a-an
to-ok aff ivery shkin.

We ha-ad to pu-ut th' shkins a-an back; it
kipt us ther-re 'til curfey.

Oi ho-o-pe this wan is good enough. Yours
thruely, sor,

TIM FAY."

PAT MURPHY."

A. MILLION DOLLARS.

BY B. M. ADLER.

What This Great Sum Really Earned When It Was Placed on Public Exhibition.



I DOUBT if you, or any one else, outside of the scant half-dozen people who were directly concerned in the matter, know of the circumstances which brought on the Million Dollar Exhibit. You remember it, eh? As far as I am aware, it was about the only thing of its kind that ever took place in this or any other country:

It was exactly what its name implied. It wasn't a million dollars' worth of this, or a million dollars' worth of that, or a theatrical production that cost an alleged million, or a million-dollar beauty contest, or anything of the sort. It was just an exhibition of one million in United States ten-dollar gold pieces.

With some, a mere misfortune acts as a stimulant, while an actual disaster is not without its sharp delight. These are the men who bulge behind the ears, being possessed of highly developed bumps of combativeness. Theirs is the gladiatorial spirit which loves the struggle for retrieval for its own sake.

They build railroads, irrigate arid regions, organize trusts, and do big things on a big scale. Their joy lies in overcoming, and they are never so dangerous to the men or things opposing them as in the moment of supposed defeat.

Samuel Doniford was one of this kind. As he stood at the window, watching the bustle on Broadway below, you would never have dreamed that he left his hotel a few weeks before, a fairly wealthy man, and had returned to it early the same afternoon—broke.

He was the only one who had suffered, for the reason that the enterprises in which he was interested were in the foundation period, and he had paid the cost up to that point.

Consequently, the question of "settling up" was a matter of a few hours only, and when

it was all over, he took himself off to the Catskills, showing up at the mountain hotel only at meals and bed-time, and spending the intervals among the pines, thinking.

He had returned to town earlier in the day, intending going down to the "Street," but a pile of accumulated correspondence prevented him. This explains why he was on upper Broadway at an hour when he would have been on his way up-town.

Yet, in spite of all, Sammy D., as he was known in certain "Street" circles, looked as if he was enjoying life to the full. With his hands plunged deep in his pockets, his legs somewhat apart, a sparkle of content in his eye, and placid smoke-wreaths issuing from his cigar at complacent intervals, he seemed anything but the ruined speculator which, in actuality, he was.

He did what the layman calls "speculating in Wall Street."

He had successfully promoted divers companies, some of which had subsequently flickered out while others had remained, attesting to his integrity and such financial genius as was his. He took a "flutter" here and he dabbled there—wherever he detected money breaking the surface of the financial waters.

Naturally such a business has its ups and downs, its big winnings and big losings, its unexpected plums and equally unexpected frosts.

Sam was, and, indeed, had been, on the down-grade for several months. The last straw in his financial back-breaking was added when one special enterprise in which he was interested, and which had been looked upon as sound, was found to have foundations of sand.

That is how it came to pass that within a few brief hours he was removed from the domain of the financially comfortable to the region of the "busted."

Last of all came a "black Friday" that seemed to gloom over the last vestige of his hopes.

Above the roar and bustle of the thoroughfare below rose the cries of the sellers of "Extras," raucous and ear-splitting.

"Nother Day of Disaster! More Wall Street Firms Go Down! Outlook Darker Than Ever!"

Sam smiled, as he listened, but there was the light of battle in his eye. He looked at the clock. It was 4.15 P.M., and, before long, the retreat from Wall Street would make itself evident in the hotel-corridor, which was a favorite lounging place with "bulls" and "bears."

Then he went to the telephone and called up the hotel-desk.

"Is that you, Carter?" he said, as the clerk answered. "Well, I am not at home to any one—no one, remember—except Mr. Carwell."

"All right, sir."

"When Mr. Carwell comes, send him right up. And tell him to ring my bell three times. I shall not answer any other rings."

"Very good, sir."

Doniford hung up the receiver carefully and with a curious smile on his face.

Fifteen minutes later, the door-bell of his suite rang thrice, and Joseph Carwell, of the brokerage firm of Biddle, Carwell & Johns, entered.

Carwell and his associates cater to the outside public, their private "lamb" trade being comparatively small. Publicity being the foundation of their business, the principals of the firm, either in an individual or a collective manner, never failed to take advantage of an opportunity which should keep their names before the people.

Carwell and Sam Doniford were old college chums. When both drifted into the financial district, business bound them tighter. Doniford not infrequently did "outside" work for the firm, and Carwell and his associates had been interested in the former's enterprises in more than one instance.

"Hallo, Sammy," said Carwell, "how goes it?"

"Oh, so, so, Joe," replied the other.

"Still broke, Sam?"

"Yes, Joe, broke and down and out. But I'm not crying about it."

Carwell looked at his old chum with a leer of suspicion for a moment. Then he said:

"You can count on me and a lot of the boys to see you through."

"I am not so sure of that," smiled Doniford.

"I think you ought to be pretty sure of us by this time," answered Carwell.

"Why, yes, but there are limitations to every man's friendship."

Carwell tapped the floor with his walking-stick with a touch of good-natured impatience. "Out with it," he said. "What can I do for you, old man?"

"It isn't a question of what you can do, but whether you will do it."

"I am waiting for the question."

Sam paused and blew a ring of smoke.

"Joe," he said, "you may think me crazy when you have heard what I am going to say, but I am not, and I am going to boil my remarks down, anyhow. I have—if your offer still stands good—decided to join your firm. You asked me to do so once and I refused."

"Bully," cried Carwell, delightedly.

"Wait until I am through," replied Doniford. "I am not so sure that that smile of yours won't come off when you hear the conditions on which I am prepared to hitch up with you."

"Go ahead," said Carwell, confidently. "I think that anything that you may suggest will look good to me."

"That's the talk," said Doniford. "As a modest man, I might feel embarrassed, only I know my own worth. And now listen:

"My total worldly possessions, so far as I can figure them out—including raiment to wear and a ring wherewith to adorn—are represented by a balance at my bank of about eighty-nine dollars. I won't come to you with empty hands. Consequently, I have got to do things before I feel justified in asking you to add my name to your letterhead."

"Nonsense," began Carwell. "You must be aware—"

"I have thought this thing over, Joe, and I can only repeat that I will *not* come to you unless I can bring with me something—it will be mightily small, perhaps—something, anyhow, that will make me feel that I have at least added a drop or so to the big bucket—not meaning to insinuate that you are running a bucket-shop."

"Well, go ahead," said Carwell.

Doniford settled himself back in his chair comfortably and began to talk.

"With the average man, money is the dominant factor of interest and desire," he said to Carwell. "Everything in life tends to continue and foster this desire.

"Now, the public would like to get in

visual touch with the object of its financial affection. Very few people have an opportunity of *seeing* a vast sum of money, and I can imagine nothing with a more drawing power than the *sight* of a million dollars."

Carwell looked puzzled. "What on earth are you driving at?" he said.

"Well," said Doniford coolly, "I am as convinced that an exhibition of one million dollars in gold would attract thousands, hundreds of thousands, provided it had its proper setting, and was boomed in the newspapers."

Carwell shook his head in a mystified manner. "But I don't see how."

"Naturally you don't," replied Doniford. "If you did, I shouldn't be talking to you. I have been doing the seeing, and now—"

"What do you want to do, you chump?" asked Carwell hurriedly, beginning to show signs of anger.

"I want to put one million dollars on exhibition, and make the public pay to see it," Doniford answered, mustering up all his courage.

"Well, you must take the public for as big a fool as you are," said Carwell. "I think you have gone balmy as well as broke."

"All right. You think it over." Sam arose and took his hat. In a minute he had gone.

Carwell was too dumfounded to call him back.

"I guess I've got him guessing," said Doniford to himself, as he stepped into a neighboring café. "I'll just give him fifteen minutes to think it over. By that time he will have made up his mind to agree. If he thinks any longer, he will say, 'No.'"

He was back at Carwell's door in just a quarter of an hour.

Hurrying through the outer office, he brushed aside the surprised office-boy who really yelled, "Card, sir!" as if Doniford were a process-server.

Carwell was standing just about where Doniford had last seen him.

"Thought it over?" asked Doniford.

Carwell smiled as if he had.

"How much did you say you wanted?" asked the broker.

"One million dollars."

"In cash?"

"Cash."

"What kind of cash, Sam?"

"Gold. Ten-dollar pieces."

"And you'll put it on exhibition like a freak in a dime museum?"

"Yep."

Carwell paused. Then he paced the floor

of his office for a few moments and looked blandly out of the window at the scurrying, money-bent crowd below.

"Who'll take care of it and see that it isn't stolen?" he finally asked Doniford.

"I'll look out for that," replied Sam.

"And who'll secure me?"

"You—that is, your firm, will secure you. I'm not going to invest the money."

"That's a pretty big sum to lie idle, Sam."

"I'll pay you a mild interest on it," said Doniford. "Besides, you get your share of the gate receipts. I'll pay all of the expenses, and keep the balance for myself."

"And do you expect to make very much?" Carwell continued.

"Enough to buy an interest in your firm," replied Doniford. "It is the only way I would really come in."

All of a sudden the newspapers were filled with stories, Sunday and special articles, all based on the possibilities of a million dollars in gold.

The topic appealed to the imagination of the newspaper writers, and partly from Walter Ripley's personal popularity with the chiefs of the various staffs.

Ripley was a slick young press-agent whom Doniford engaged—a clever writer, a good talker, and a complete "mixer."

I shall give but one example of the ingenious nature of Mr. Ripley's methods. Letters appeared in a number of the newspapers questioning the genuineness of the coming exhibition. These letters were due to the fertile pen of the press-agent. The next day the newspapers came out with a statement from the Metropolitan Sub-Treasury to the effect that the ten-dollar gold pieces, United States currency, selected by one of their agents from the quantity submitted by Samuel Doniford, of New York City, had been duly passed on and found to answer all official tests.

There also appeared a long letter from Biddle, Carwell & Johns, stating that they personally pledged themselves that such an exhibit was of the value that it purported to be.

There further appeared several affidavits from well-known men of the financial districts—each of whom was a chum of Doniford—setting forth that the experts had examined the gold and had declared it to be the real thing.

Thanks to the united cogitations of Doniford and Ripley, the million, when finally arranged for exhibition purposes, made an impressive showing.

In the center of the ground floor of a large office building on Broadway a massive oaken table had been built, surrounded by a wire cage.

Around this and bolted to the floor was a cage of thin but sufficiently strong iron bars painted black, which was so constructed that it could be taken apart and easily shipped.

It was Doniford's intention to show the million in a half-dozen or more of the big cities of the country.

The table was draped in black velvet, and the floor, inside the cage, was covered with a material of the same somber hue. On the table itself were arranged forty boxes containing the bullion.

The boxes were made of oak, stained dark green, banded with wrought iron, and having on two sides bars of the same metal that slid into sockets whose ends were fastened with solid-looking padlocks.

They were also lined with black velvet, and so made that their sides could be dropped down to expose the rows of seductive disks which they contained. Overhead, a cluster of calcium lights focused their radiance on the coin.

Each box contained twenty-five piles of ten-dollar gold pieces, a hundred coins to the pile. Consequently, there were twenty-five thousand dollars in each box, which, multiplied by forty, the number of the boxes, brought the total up to one million dollars.

The weight of a pile was 25,000 grains troy, the weight of the total exhibit being about 4,479½ pounds troy, or, say, 112 pounds to each box. The height of each pile was 8½ inches, and the diameter of each coin 1 1-16 of an inch. There was much more information regarding the money in the little book which was distributed to the visitors.

When the sides of the boxes were dropped and the thousand golden piles with their setting of dead black were revealed to the audience, the result was magnetic.

First came a sort of half disappointment, then interest, next speculation, and, finally, and by degrees as the possibilities contained in the spread of gold began to impress itself upon one's mentality, an absorption of thought and feeling that wasn't many degrees removed from actual hypnotism.

The dramatic instinct of Doniford also prompted him to endeavor to convey to the audience the tremendous value of the exhibit, by means other than the cage and so forth. Therefore he had a special detail of police outside and inside the room. In addition, he

had a score or more of uniformed guards posted around the cage, keeping vigilant watch upon the audience.

Big fellows were they, each armed with a rifle, and wearing a businesslike and well-filled cartridge-belt.

In the lobbies, also, were more guards, and in the cage itself were a couple of others.

The indutrious Ripley did not hesitate to tip off to some of his newspaper friends that, during the course of the exhibit, there would be more than one attempt made to overpower the guards and get away with the money, which by no means detracted from the general interest in the show.

Altogether, then, it wasn't surprising that, on the first evening that the million was made manifest, there was a full house, including a big turn-out of Sammy's friends, while the financial element of the city was also out in force.

At a late hour that night, and at his hotel, Doniford was reading a statement to this effect:

Disbursements:

Cost of boxes, screens, table, cage, etc.,	\$195.00
Transportation of specie.....	50.00
Pay of eighteen guards, one day.....	180.00
Ripley, one week.....	100.00
Expenses, ditto.	50.00
Hire of hall.....	100.00
Ushers, etc.	20.00
Advertising.	260.00
Entertainment of police, etc.	75.00
Souvenirs.	80.00

Total. \$1,110.00

Receipts:

103 box-seats at \$2.....	\$206.00
221 box-seats at \$1.50.....	331.50
1,106 seats at \$1.....	1,106.00
830 admissions at 50 cents.....	415.00
319 books at 25 cents.....	79.75

Total. \$2,138.25
1,110.00

Net. \$1,028.25

Sammy nodded his head in a satisfied manner, saying to himself, "This makes a good start. Ripley's all right: I shall look after that man in the future."

Then he went to bed.

The exhibit, passing through various stages of mere vogue, soon became the biggest thing in town. It took many and diverse forms.

The inevitable thriller based on "the million" made its appearance at a local theater. Pulpits by the score used "the million" as a text in one direction or the other. At an

anarchistic meeting that was broken up by the police "the million" served the purpose of pointing a moral anent capitalists and their useless hordes.

Ripley grinned cheerfully when accused by Doniford of having put the police "next" the gathering.

The vaudeville performances bristled with gags regarding the exhibit, and it was also responsible for the popular song, "I Am the Man Who Made a Million in a Minute."

There was a million sextet interjected into a Broadway show. "The Merry Million Maidens Burlesque Company" appeared on the Bowery, and the word "million" became an integral part of the slang of the day. Food products and articles of ware from hose to neckties had "million" tacked on them.

The crop of cranks bred of "the million" was naturally a large one, and of all sorts and descriptions. It varied from the silent to the noisy, from the harmless to the more or less dangerous, from the blasphemous to the fervently religious.

One old fellow with a long white beard and a limp would walk around the big room for hours at a time, occasionally stopping to make worshipful gestures toward the interior.

Still another got into the habit of creeping into the lobby two or three times during the afternoon and evening, and attempting to preach on the sin of Mammon worship, using "the million" as a text.

An elderly woman, wearing a bonnet that dated back to the sixties, would insist upon it that "the million" was a part of the sum stolen from her by the government.

One gentle-eyed, shabbily dressed elderly man was accustomed to come to the box office nightly and, in an apologetic tone, ask for the loan of "the million" until the midday following. On being refused or asked to call again when the exhibition was over, he would extend profuse thanks and walk quietly away. He appeared every day during the run of the exhibit, and never attempted to voice a protestation in regard to his hopes deferred.

A little fiery dwarf with an enormous head was another of the regular callers at the box-office. He was brief and to the point. "This money is mine! Give it up or I'll—" here he would scowl fiercely, growl in a guttural fashion, spin on his heel, and exit rapidly.

One tall, thin, venerable woman buttonholed Doniford one evening, and informed him that the incitement of people to greed and covetousness was a sin, and that she looked upon all those who were responsible for the exhibition as totally condemned.

Scores on scores of unhappy creatures, ill-clad, half-starved, and shivering, would implore the doorkeepers to let them have just a peep at "the million," or would endeavor, by means of the most ingenious excuses, to gratify their wish.

Several plain-clothes men who were stationed in the lobby informed Doniford that dozens of well-known crooks had taken in the show, either through curiosity or to pass upon it from a professional standpoint. One of these, on emerging from the hall late one night, was tapped on the shoulder by a detective.

"Hallo, Red," said he, "I thought you were out West?"

The crook grinned. "So I was. But I didn't like the climate."

"What do you think of the show?" queried the sleuth.

The grin broadened. "Say," said the snapper-up-of-unconsidered trifles, "these guys in New York is the easiest ever. I seen that the stuff was phoney the minute I put my lamps on it. And they's going down in their jeans to give up, thinking it's the real thing. Give me regards to the guy who's running this joint, and tell him I'd be proud to meet him."

A fashionable doctor discovered that the exhibit was responsible for a brand-new nervous disease which he christened "million-melancholia," and to which a Sunday newspaper devoted a couple of pages with illustrations.

Another doctor proved conclusively that rapt gazing at "the million" developed an hitherto unknown form of hysteria; while still another, through the pages of a scientific weekly, laid stress on the curious type of hypnosis produced by prolonged contemplation of the glittering mass. Which hypnosis was no figment of imagination, but a fact.

But still the crowds paid their money to see "the million."

On the other hand, the show had its tragic side. In the cases of at least three persons, the sight of "the million" seemed to bring to a crisis a latent madness that lurked within them.

Two suicides, according to the police records, were traceable to the unsatisfied desires brought into being by the mocking money.

A husband, seeking separation from his wife, alleged that she neglected her home for the sake of the society of "the million."

The jokesmiths of the evening newspapers and the comic weeklies averred that "the million" girl had replaced the matinée girl—which was no joke.

A new color of a reddish saffron was christened "million mauve," and dress goods and milliners' materials made the tint fashionable.

A number of well-meaning and altogether mistaken persons wrote or spoke to Doniford, begging him to close the exhibit on the score of its demoralizing effect on the public, to which Doniford politely replied "that money of itself was a good thing, and the result that it wrought on people was the outcome of their temperament, and not due to any evil inherent in the coin."

It was in one of the big cities of the West that the boxes containing the million dollars were opened for the last time. A number of theater managers in various parts of the country had offered Doniford later "dates" on liberal terms, but to these he turned a deaf ear.

The exhibit had accomplished the purpose for which it was brought into being. The account now stood thus:

Gross earnings, including royalty on sale of Biddle, Carwell & Johns' literature in halls	\$43,611.20
Total expenses	14,800.63
Balance.	\$28,810.57

With three more days to run, there was every chance that "the million" would bring his net profits up to \$30,000, which was comfortably in excess of the sum he had originally proposed should warrant him on accepting the offer of Biddle, Carwell & Johns.

At length came the final hours of the public life of "the million." In spite of the nipping cold of the night and the occasional flurries of sleet that could find no resting-place on the wind-swept and frozen pavements, the gigantic auditorium was crowded.

"The million," in this particular city, had "caught on" with society with a vengeance. This, perhaps, because society had been brought into being within the generation and by quickly acquired millions.

Night after night there had been a tremendously impressive display of gorgeous décolletée gowns, and plastrons, and hoops, and headpieces of diamonds, and many liveries and lines of motor-cars, and all the rest of it.

In the lobbies there was the usual loud chatter, bad manners, crushing and pushing and rushing, and total disregard of everybody else's rights and comfort.

But once inside—the spell of "the million" wrought silence and the protean emotion of greed that took on the forms of many emo-

tions, and a curiously quiet crowd would emerge from doors through which it entered.

There had been the usual difficulty in persuading some of the audience to vacate their seats—there being the every-day sprinkling of the slightly mad—but, at length, the ushers had effected a clearance, the hall was being clad in its night raiment, and the detail of guards for the night clustered around the cage awaiting the appearance of Doniford and Ripley to open its door, enter, and lock the boxes.

In the lobby, and sheltering themselves as best they could from the searching blasts that swept in at the front doors, was the platoon of police that had been told to aid the guards in their vigil.

"'Tis the lucky boys we are," said the roundsman in command, as he turned his back to a howling gust. "B-r-r-r! I'd hate to have a river post to-night."

"Except one was watchin' th' tide come up an' th' tide go down, wid his eyes behind a glass and his lips to it," suggested a fat bluecoat with a fiery red mustache.

"An' a trial, an' a fine of thirty days' pay to follow," replied "Rounds" severely.

"True 'tis, but like th' rest of me brave fellow officers, I've never been fined because—"

"Nivir mind your because," broke in the roundsman testily. "Be thankful that ye are living this bitter night, with hot coffee and sandwiches to come and—" He stopped.

"An' what?" asked a blue-nosed cop.

"Curiosity killed the owl, Byrnes," replied "Rounds," "an' I don't think it would be fittin' to encourage ye lest ye meet with a like end. But I'm told that Mr. Doniford is a mighty generous man an'— By me country's sake! What have we here!"

A savage and shrieking gust seemed to blow into the lobby a weakened figure that weakly tried to resist the rude play of the wind. Then the blast died as suddenly as it had come, leaving its shivering plaything stranded in the expanse of onyx and marble.

He was very old, and a much-shrunken man, with a short, thick, snow-white beard. What little flesh was left on his deeply lined face was livid, scarlet, and purple with cold. His eyes, that had retreated far back in their sockets, were of an intense blue, but watery and uncertain. A suit of shabby black, shoes cracked and holed, but much polished where there was any leather to polish, a frayed but clean collar, the remnants of a white tie, a single glove, and no overcoat, constituted the attire of the forlorn creature.

He looked around him dazedly, tottered, and would have fallen had not the roundsman caught him.

"What's the trouble, friend?" said the big policeman as he steadied the frail form.

"Nothing—I thank you," quavered the old man. "I—ah, yes, I remember. I was on my way to—to—my apartments when—"—he passed a blue hand over his forehead—"something I—ah—do not know what—" Here he stopped and eyed the other in a frightened fashion.

"Well, sir?" said "Rounds" encouragingly. "Go on. You were saying that you lived—where?"

"Why, what does it matter to you where I live, sir!" cried the other shrilly. "I—ah—you have no right to ask me! How—how dare you be guilty of such an—impertinence! I have done nothing, wrong—nothing wrong—why, then—why—"

He would have fallen again if it had not been for the arm of the officer. "Rounds" beckoned to one of his fellows.

"Ring up headquarters," he said in an undertone, "and tell 'em to send an ambulance from St. Stephen's. He's nutty with the cold, and in a bad way generally."

"I beg your pardon, sir," said the object of "Rounds's" solicitude, when he had recovered himself a little, "but I am not—not—quite myself to-night. You see, I've been—yes—I've been—ah—" Again the blue hand made its unhappy gesture over the forehead.

"Of course, sir, of course," said "Rounds" cheerfully. "This weather would put any man down and out—"

"I—do—not quite understand," answered the old man doubtfully. "I am—not down. I am—that is—I was—" He muttered and tapped his foot with weak impatience. "It is very annoying not to remember—just what—one—is when—"

"Look here," said the bluecoat coaxingly, "s'pose you rest for a while inside, and have a cup of coffee and then—we'll take you home—"

"No, sir," he answered with pitiful fierceness. "I allow no man to take me to my apartments. I am quite capable—of—of, you know—"

He stopped and sobbed miserably.

"That's all right," said the officer assuringly; "and now come in out of the wind, and we'll fix you up and you'll feel as fit as a fiddle in no time."

"Both ambulances are out at St. Stephen's, Jim, but they'll send one on from the Burgess

in about fifteen minutes," muttered the cop, who had been to the phone.

"All right; and, say, ask the box-office if we can take this old chap inside the hall to wait for the 'bus. I reckon 'the million' won't be in no danger from him."

Permission was given, and, almost carrying the unfortunate, the roundsman put him into an orchestra chair. Looking around cautiously, the man in uniform produced a flask from his hip pocket. Unscrewing its top, he poured some of the contents between the blue lips of his charge.

The old man gasped, choked, and stammered incoherently.

"Feel better?" said "Rounds."

"Thank you. I—ah—yes—I was cold."

He remained quiet for a few moments. As the stimulant began to take effect, he looked around him curiously until his eyes rested on "the million," for the calciums kept their steady vigil all night.

As he looked, the spell began to work upon him, the livid hue of the cold seemed to leave his cheeks, he straightened himself, his trembling hands clutched convulsively at the arms of his seat, his breath came in quick gasps, and his eyes emerged from their obscurity.

"Where am I, and what is that?" he asked in a tone of almost savage entreaty.

"This is the Coliseum, and that is a million dollars—you must have read about it in the newspapers!"

"A—million—dollars!" he shrieked.

"Sure," cooed the bluecoat, laying his hand soothingly on the other's shoulder.

Again there was silence. When he spoke again, the voice of the poor wretch was no longer recognizable, but it had a ring of command in it that sent a thrill of astonishment through the seasoned "Rounds."

"Jarvis, how often have I told you not to serve the '53 vintage with the coffee? You know that I prefer that cognac that Villiers sent me from La Rhame. You are very forgetful, Jarvis. Put a screen here," said the old man.

His thin fingers tapped impatiently on the seat arm, and the shrill voice went on:

"Let the coach meet madam at midnight. No, I am not going myself. Spread for three in the red room. I am not at home to any one to-night, except to Mason and a friend that he may bring with him. Do you hear, Jarvis? Do you hear?" He turned a pair of querulous eyes on "Rounds."

Then his mood changed, and he began muttering broken phrases, which, so far as

the other could gather, had to do with financial affairs in which big sums of money were involved.

"Kemp," said the old man suddenly, "I shall drive to my office to-day in the Russian sleigh. Have it ready for me in ten minutes, and send across the road to ask if Munford will accompany me." Here he broke off. "Munford, Munford, the infernal scoundrel!"

He burst into vehement denunciations of men whose names "Rounds" could not quite catch, yet some of which seemed to be familiar. Somebody had apparently done grave injury to him. Then he stopped abruptly.

"Jarvis," he said very feebly, "you will have to help me from my carriage. I—I am not well this morning. Now, now," and he put his arm inside that of the roundsman and rose with an effort to his feet. "We will go to the bank first." He pointed in the direction of "the million."

"Rounds," thinking to humor him, led him slowly down the aisle, the old man's eyes, their pupils dilating with every step, fixed on the glowing mass of yellow inside the cage. Suddenly he halted, and the blue-coat could feel the blood leaping through the shrunken veins of his companion's hands.

"That—is—the—"

"The million," said "Rounds" softly, and even as he spoke a tremor ran through the frail form that he was supporting.

"The million!" cried the old man with an awful shriek. "You lie! 'The million' went where other millions went. They—they—" He drooped suddenly.

"Rounds" lifted him up and placed him in a seat, then ran to the door just as the ambulance came clanging down the street.

The shrunken form was lying easily in the broad, luxurious expanse of blue velvet on which it had been placed by "Rounds." A sort of cynical smile curved the bloodless lips.

It was an easy matter to expose the bony chest, for nothing but the coat and shirt had to be removed.

"Heart disease," said the surgeon. "Dead as a door-nail."

With the surgeon had come some policemen. One was an old, grizzled fellow, who had passed the greater part of his life on the force. O'Brien was his name. On divers occasions he had been promoted, but on divers occasions reduced, by reason of his combative instincts, which were always getting him into trouble. He was an encyclo-

pedia of crime so far as the metropolis was concerned. Even as he looked on the body he uttered a cry.

"Well," said Rounds sternly, "have ye no respect for the dead?"

O'Brien pointed with a shaking finger to a triangle of faint blue stars tattooed on the breast of the dead man.

"Hold your tongue man, hold your tongue," he said hoarsely. "Do you know the meaning of that?"

"No," said "Rounds" wonderingly, while the others gathered around, for they knew that it would take much to so move O'Brien.

"Do you remember, any of you—no, you don't, you're all boys—the failure of the Shipping and Transportation Bank, way back in the early sixties, that ruined thousands?"

"Rounds" nodded. "I have read of it."

"Do you remember its president?"

"I don't."

"He was Watson Scoville, once of the United States army, known as 'Stars' Scoville. During the war with Mexico he was a captain. He used to strip himself to the waist, and he had three stars tattooed on his breast, and his men, who loved the very shoes of him, gave him his nickname because of them—the stars."

"Rounds" drew his breath. "I remember it all now—that is, I read of it."

O'Brien took no notice, but went right on:

"The reputation he had was great, and the friends he made were many, and so when he became one of the directors of the bank it flourished, and he was made president.

"Then, boys, it was women and wine, and all the rest of it. Then came speculation, and then—the smash. One morning the bank's doors were closed and 'Star' Scoville was missing. It was a popular bank, and thousands of poor people were ruined. Scoville was blamed for it all, although some declared that he had been led to do wrong by a couple of his most intimate friends, who were his enemies.

"He was never heard of except by rumor, and that from many lands." He paused and added slowly: "There was—and, as far as I know, it is still standing—a reward of five thousand dollars for him, dead or alive. But show me the man that would dare claim it!"

Then there was silence.

From behind, "the million" glared at the living and the dead with its dull, yellow stare.

Ten Thousand Miles by Rail.

BY GILSON WILLETS,
Special Traveling Correspondent of "The Railroad Man's Magazine."

DOWN in sunny New Orleans there are many good railroad yarns, and little wonder that Mr. Willets, while in that charming old city, found a goodly bunch and a kindly lot of railroaders to tell them. Thanks, once more, boys. Many may marvel at the first story told here by the Scottish disciple of Sir Izaak Walton while he patiently awaited a bite. And yet the speed of a train and the speed of a horse may be compared without creating much doubt, especially when the horse is a Kentucky thoroughbred spurred on by a pretty girl.

No. 5.—ROMANCES OF CRESCENT CITY RAILROADERS.

A Girl Who Played Jockey To Prevent a Head-on Collision—The Stork Train—Bledsoe's Locomotive Ataxia—When Seab Davis Stayed—An Engineer's Sixth Sense.



HE south-bound night local of the Louisville and Nashville Railroad stopped at Bonnieville, Kentucky. The only passenger to alight was a young woman, who, after entering the station, put her hands on the operator's shoulders and permitted him to kiss her.

"Oh, you turtle-doves!" sang out the conductor, who had entered to hand the operator certain documents in yellow envelopes.

"Con," he went on, addressing the operator, "the despatcher at Louisville is sorry, but he couldn't send a relief by this train. He says if you can hold out till morning, a relief will arrive on the up train from Nashville."

"I've been on the job now over thirty-six hours," replied the operator, "but I reckon I can hold out till morning."

The conductor departed, the train pulled out, and the young girl said:

"Why, Con, what's happened? You say you've been here since yesterday morning?"

Conrad Wells, that being "Con's" full

name, explained to his *fiancée* that the night operator, on the preceding day, had been taken ill and couldn't come to work. Therefore, Con had remained at his post, notifying the despatcher at Louisville of the night man's illness, and asking that a relief be sent down at once. But the needed relief had not come, and the conductor of the down train had just brought word that the new man would not arrive till morning.

The young girl, Annie McSway, had just returned from a week's visit to Louisville, so all this was news to her.

"Look here, Con," she said, "you're almost asleep now. Let me take your place. You go over to the farm and go to bed."

Con shook his head, obstinately refusing the girl's pleading that she be permitted to take his place.—Con was a boarder at her father's house, two miles from the track, and Annie had promised to marry him. She had learned the Morse code with her betrothed as teacher, and now she could "send" and "receive" as proficiently as any regular ham.

"Your father brought Dandy up here this

afternoon for you to ride home," Con said to Annie. Dandy was a Kentucky thoroughbred which a Louisville turfman was "pasturing" with Annie's father.

As Annie reluctantly started to leave the station, the key began clicking. She paused, listened, and made a mental note of the incoming message, the purport of which was that the north-bound night local for Louisville must be flagged at Bonnieville and held there on the siding to permit the passing of a certain "special."

"That up train is due to pass here in about half an hour, isn't it?" Annie asked. "Well then, Con, be sure you keep awake. What if you should go to sleep?"

Con reassured her, and Annie mounted Dandy and rode away. She walked her horse, though the spirited animal several times tried to break into a run. Her mind was filled with thoughts of poor Con down at the station.

She recalled how haggard and hollow-eyed he looked as the result of his long "trick," and her heart became heavy. His smile, when he had assured her that he would have no trouble in keeping awake, was positively ghastly. Annie shuddered.

"What if he should go to sleep, despite himself?" she asked herself, as she rode into the barn-yard behind her father's house.

Her father employed but one hired man. The house was dark. Both master and man had gone to bed. Annie proceeded to feed Dandy. Then, suddenly, as she poured a measure of oats into Dandy's manger, she heard a locomotive whistle.

"It's the up train," she said. "The whistle means that it is approaching Bonnieville station. In a moment it should stop."

She went out of the stable and listened. Through the still night she could distinctly hear the train rolling along, two miles away.

"Great Heaven!" she exclaimed. "It did not stop. Con failed to flag it."

With presence of mind, she flew to the saddle which, a few minutes before, she had taken from Dandy's back.

She knew that she must ride for the lives of the passengers and crews of the up train and the special, and must reach one or the other of them before they could meet.

"I'll ride to where the post-road crosses the track four miles from Bonnieville," said Annie. "That gives me only two miles to ride, while the up train must travel four miles."

This happened in the days of hand-brakes, when the Louisville and Nashville was a

single-tracker through that part of Kentucky. It must be explained that the track from Bonnieville, to a point four miles north of that town was crescent-shaped, and that two miles from the track, yet midway between the two ends of that crescent, stood the McSway farmhouse. Seven miles up the track from Bonnieville station was Upton, the next station north.

The relative position of the farm and the crescent-shaped track was such that, in no matter which direction Annie rode, the distance would be about two miles. She struck out on the post-road in the desperate hope of reaching the track at the point where the road crossed it at the end of the crescent, four miles north of Bonnieville.

Could she reach the crossing before the local could travel the four miles up from Bonnieville, or before the special could make the three miles down from Upton?

That was the supreme question in Annie's mind as she let Dandy go at full gallop.

She had heard her father say that Dandy could make a mile in four minutes. She would be at the crossing in about eight minutes. If only the up train took a trifle longer than eight minutes to run the four miles around the crescent, she would be in time.

Before starting, Annie seized an unlighted lantern. After covering the first mile she thought of lighting it.

She gave a cry of horror. She had no matches! How foolish to have forgotten to bring a match! Well, the lantern was useless. Should she get rid of it? throw it away?

She would keep it, for maybe she would pass some one on the way who would have a match.

Along the post road galloped Dandy. Annie wondered if the train was gaining on her. She had no way to reckon time. All she knew was that when she pulled up Dandy down at the crossing, she was within the rays of the headlight of the up train. Annie breathed a sigh of relief. She was in time. As the headlight drew nearer, she waved her dark lantern.

The engineer did not see her! The train rushed by!

At the crossing, the post-road turned and ran parallel with the track all the way to Upton. Quick as thought, Annie now drove her heels into Dandy's ribs and tore on up the track, in a desperate race to overtake the train.

"If I can only catch up with the rear car," she told herself, "and hurl this lantern

in through one of the windows—surely then they will know enough to stop.”

On, on she raced, a horse against a locomotive. And she actually overtook the train. Summoning all her strength, then, she flung the lantern at the rear car, trusting that, by

“We had to shoot your horse, Miss Mc-Sway,” was the reply, the shot accounting for the boom of cannon.

“He was all tore to pieces and in terrible pain,” continued the man who bent over Annie. “He seemed winded, beyond recovery.



THE ENGINEER DID NOT SEE HER! THE TRAIN RUSHED BY!

sheer good luck, it would crash through one of the windows.

As she hurled the lantern, however, Dandy swerved and dashed pell-mell into a barbed-wire fence, sending Annie flying into a freshly plowed field. She lay there very still.

She thought she heard the boom of a cannon, and it awoke her. Men stood over and around her, and she heard one of them say: “It’s all over. He’s dead.”

“Who’s killed?” were Annie’s first words.

That’s the way with thoroughbreds. They’ll run till they drop, never to rise again.”

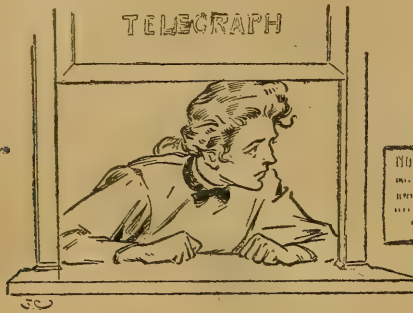
“Dandy dead!” gasped Annie. “My poor father! He was responsible for that horse, and the owner may make us a deal of trouble.”

She remembered the reason for her ride, and now she quickly explained the situation to the men around her.

“We thought something was wrong,” said the conductor, “or you wouldn’t have tossed your lantern into the car. Hey, there!” turn-

ing to a trainman, "you take a lantern forward. We'll back down to Bonnieville, and then resume the run and pick you up after we've let the special pass."

Annie, suffering nothing worse from her fall than a badly bruised body, walked to the train, which was backed to Bonnieville station.



"What do you suppose happened to Con Wells that he didn't flag us?" asked the conductor of Annie on the way back.

"I suppose he fell asleep," replied Annie. "Poor Con! Do you suppose they will discharge him for this? We want to marry next month, but if they discharge him—well, I don't know what we'll do. And poor Dandy! What will my father say? Will he have to pay for that horse, do you think?"

She explained how the thoroughbred had been entrusted to her father for pasturing and exercise.

"It'll be all right, little girl; don't worry," said the conductor comfortingly.

At Bonnieville station the engineer backed the train on to the siding, while the conductor and Annie rushed breathlessly into the station—only to find that Conrad Wells was not there.

"Where can he possibly be?" asked Annie, so deeply distressed that she could speak hardly above a whisper.

She felt that Con had run away.

While they searched in vain for the missing operator, the special thundered by—none on board knowing that the train had been in dire peril.

Annie pleaded with the conductor to permit her to take Con's place till he should return.

"Perhaps he chased after the train," she said, "and is somewhere up the track now, on his way back."

Anyway, she held the conviction that Con Wells had flown for all time from that region.

Some such thought seemed also to be in the conductor's mind, for he said:

"Let's think a minute, little girl. An operator, worn out by a watch of thirty-six hours, falls asleep just because he can't keep awake. Possibly he had been asleep only one little minute when my train, which he should have flagged, rolled by and woke him



"I WANT TO MARRY THE GIRL THAT SENT ME THIS DRAFT FOR A HUNDRED DOLLARS."

up. Too late, however, to flag us. Well, Con was an imaginative customer. He sees the two trains come together.

"He beholds fearful slaughter. He feels that he is disgraced in the eyes of the railroad company. He is ashamed to face you, the girl he is engaged to marry. Above all, he hears the victims of the disaster crying out their reproaches between their groans of agony. Maddened by these thoughts and visions, his nerve gone and his mind unbalanced by what he has done, he rushes out into the night, raving, not knowing where he is going or what he is doing. That is how I account for Con's absence. But he will turn up to-morrow," the conductor added consolingly, "and if he is discharged, Annie, you stick to him."

"Of course I will," she answered. "And now—I'll take his place to-night and stay here till the relief comes in the morning. I understand all the duties of an operator."

The upshot of the matter was that the train pulled out for Louisville, leaving Annie McSway in charge at the Bonnieville station, where she remained on duty till morning.

Then she trudged homeward, tears welling from her eyes on the way. Con Wells, her sweetheart, had not appeared.

Her father, after hearing the story, tried to show Annie that he was not worrying over the death of Dandy. Annie, however, fully understood how deeply anxious he was about that horse, and, silently, she grieved with him.

Two days later, two letters were handed to Farmer McSway at the Bonnieville post-office. One was for himself—and it contained a bill for one thousand dollars from the Louisville owner of the thoroughbred, with a curt note saying that McSway had "permitted the animal to be ridden recklessly to death."

The other letter was for Annie—an offer from the railroad company to employ her as successor to Conrad Wells, as operator on the day watch at Bonnieville.

During the two days since her wild ride, Annie had not heard a word from Con, nor had any one else. He had disappeared, as if swallowed up by the earth. Furthermore, Conrad Wells was never heard from thereafter by any one in Bonnieville.

Annie accepted the proffered position with the determination to save part of her salary every month to pay for the horse.

Weeks passed. Not another line was received by Mr. McSway from the owner of the horse, yet the old man grieved over the matter more and more each day. He wrote to the owner, pleading that he be released from responsibility for the death of the horse, saying that "it was a great ride for a great purpose," and that a rich man should not seek damages from a poor man, "considering the circumstances under which the horse met its end."

No answer came from Louisville. Annie's father grieved till he died.

"A broken heart," Annie sobbed.

After her father's death Annie continued to run the farm, with the help of the hired man, at the same time attending to her duties as operator at the station. At length, after weary months of work, she had saved one hundred dollars, which she sent to the owner of Dandy, saying that it was the "first instalment on account," and adding that she would send further instalments of a hundred dollars as fast as she could save the money, till the horse was paid for.

The very next day the down train from Louisville brought a stranger

whom Bonnieville viewed with awe. He wore a wondrous expanse of colored shirt-front and a marvelous waistcoat. A huge diamond bedecked his shirt-bosom, while another adorned one of his fingers.

"I'm looking for a young woman named Miss Annie McSway," he said to the operator at the station.

"I am Miss McSway," was the answer.

"You are? Well then, look here. When does the next train pull out for Louisville?"

"At five o'clock this evening."

"Ah! It's two o'clock now. Can you be ready to go up on that train with me, Miss McSway?"

"Why, sir, what on earth do you mean?"

"I mean that I want to marry the girl that sent me this draft for a hundred dollars for a dead horse o' mine. I was the owner of that horse. When I wrote your father, enclosing a bill for the animal, I didn't know the circumstances under which the horse was killed. As soon as I heard all about it, however, I let the matter drop and went off to Europe, forgetting to write to your father to tell him it was all O. K., and that Dandy was killed by a Jim-dandy girl in a mighty good cause, and to let the matter drop.



"JACK, I CAN'T MOVE MY LEGS."



"Well, Miss Annie, here I am. They tell me your father died of a broken heart because he could not pay for that horse. I'm here to make reparation to his daughter to

the farthest extent a man can go.

I want you to marry me. A girl like you, that saves a hundred dollars out of a picayune salary to pay what she supposes to be her father's debt, is a girl who'll make a good enough wife for me. Are you game, Miss Annie?"

Annie said she couldn't even entertain such a proposition—and the man with the loud clothes went away with a smile that showed that he wasn't to be defeated easily in anything he undertook.

To Bonnieville he returned once a week, for weeks and weeks, always to put the same question to Annie. He sent a whole string of horses to be boarded at her farm, and paid fancy prices for their keep, so that Annie soon found that the income from her four-footed boarders amounted to about ten times the amount of her salary.

"But then," she argued, "he may take the horses away some time, and then where'll I be?"

So she clung to her job as operator at the Bonnieville station, despite the income for the care of the horses.

"By ginger! you've got the grit of a man," cried the turfman from Louisville one day on arrival at Bonnieville. It was then four months after he had made Annie his first proposal of marriage.

"I want to tell you, Annie," he said, "that this siege is on for keeps—and I never give up."

He never did give up. He discarded his noisy clothes and arrived one day in Bonnieville in refined apparel.

Annie smiled as he approached.

That day the village parson performed a marriage ceremony, after which Annie, the bride, went up to Louisville, with her bridegroom, to live in a big house and enjoy the happiness she had earned.

This tale was related by a gray-haired Scotchman, while he fished in Mississippi Sound, at Pass Christian, Mississippi, from the end of a pier. He is a retired railroader, well-to-do in worldly goods. I sat beside him as he told the story—and he didn't get a single nibble. That didn't bother him, however, for during his recital he seemed to

have forgotten all about the business of fishing.

"Sweet Annie McSway!" he exclaimed, after finishing the tale. "Ut was a bonnie lass of Bonnieville, she was."

"Oh! Then you knew her yourself—personally?" I said.

"Aye! And her poor father, too. And a braw mon he were, lad. Don't ee see, lad, 't was I that was the new mon up from Nashville that relieved sweet Annie McSway that marnin' after her greet ride. And 't was I, lad, that relieved her every nicht at the end of her work o' the dee."



"No wonder you know the details of her story so well," I said.

My meeting with this interesting Scotchman was purely accidental, and the manner of it was this:

On February 8, last, in a Pullman of a Louisville and Nashville train, on the run from Mobile to New Orleans, a traveling salesman handed me a card on which was printed this warning:

VOID NEW ORLEANS, FEB. 7-9.

The drummer explained that the warning was given to traveling men at the time of the Mardi Gras in the Crescent City, because hotel accommodations were practically impossible unless one had engaged rooms ahead, and also because business could not be transacted with expedition while the crowd remained in the city. To "avoid New Orleans," the date being February 8, I left the train at Pass Christian to remain there overnight.

In that tourist resort, I thought, there would be a dearth of railroad stories. Nevertheless, I went down to the station to look and listen for any possible grist for my mill.

A train from New Orleans pulled in. In the cab was an engineer whom I had met, two years before, while staying at Biloxi—Engineer François, who had the run between New Orleans and Mobile.

"Hallo!" he cried, remembering me. "Here! let me show you a shaving from one of the biggest wads in the country."

He displayed a crisp, new five-dollar bill. "A lady from New York handed me that, in an envelope, when I pulled her into New Orleans this morning," said François. "At the

same time she gave my fireman three dollars, and the conductor and trainmen got something, too. At every change-crew place all the way down from New York, she sent out tips from her private car—just like these. The lady was Mrs. Russell Sage. She's here for Mardi Gras."

Just then François received the signal to pull out. "Go talk to Old Man Rutherford," he shouted, as he opened the throttle. "There he is—down there by the station—cussing about something. He came down with us from New Orleans to fish. So-long!"

In front of the station, the man whom François had called "Old Man Rutherford" was venting his indignation thus:

"Ut's feelin' sick I am. Ut will not be good for that mon if iver I catch 'im wi' that feeshin'-rod."

And he swore some more.

"Thought you were a good Presbyterian, Mr. Rutherford," said one of the station-men.

"Aye, mon. So I be. But, don't ye see, I don't gie a saxpence aboot the kirk ween I'm mad like noo."

And he tore off toward the town, swearing

some more in his excitement.

"He's Old Man Rutherford," said the station-man. "And he's a regular bang-goes-saxpence Highlander. He's an old railroader from Kentucky. He began as an operator, became a conductor, and retired some years ago. Lives in New Orleans, and comes over here once a week to fish. On the trip over here just now some one stole his fishing-tackle, and that's what he's so mad about. But he will buy a new rod and will fish, just the same. You'd better get next to him—he's chock-full of railroad stories."

The next morning I found Mr. Rutherford at the end of the pier. I introduced myself, and after a while he said:

"Hast iver heard, lad, of sweet Annie McSway, the bonniest lass of Bonnieville, Kentucky? 'Tis a sad tale mostly, but if 'tis stories of the railroad you're feeshin' for, 'tis of sweet Annie McSway that I'm thankin' I must tell ye aboot."

Forthwith he spun the yarn, in his own dialect, the most important facts in which I have repeated here.

A girl with wondrous hair, and exceeding efficient as a news-agent, stood behind her phalanx of magazines at the news-stand in the Union Station, New Orleans, and bestowed upon me a generous smile, as I picked up a copy of THE RAILROAD MAN'S MAGAZINE for March, 1910, and dropped a dime into her self-supporting palm.

"I know you," she said. "Your picture is in there," pointing to the red-covered magazine. "Go over to the Grunewald Hotel," she added, after having asked me a million questions about the Great White Way. "There's a stack of two hundred sawbones over there from the Eye-See and the Yazoo. They just came in this morning."

I went to the Grunewald and made the acquaintance of some of the "sawbones." They were members of the Joint Association of Surgeons of the Illinois Central, the Yazoo and Mississippi Valley and the Indiana Southern railways.

They had just come from a smoker given them by the New Orleans officials of the Eye-See, and they told me of how they had presented a big mahogany hall-clock to their secretary, Dr. Charles Fry, who had been sawing bones for the Eye-See for three and thirty years, and was altogether the "greatest-ever" railroad surgeon.

One of the Eye-See doctors then went with me to a quiet corner of the lobby under the balcony where the orchestra played, and related this story of an Eye-See engineer.

Will Bledsoe, with a run out of Memphis, Tennessee, to Paducah, Kentucky, was such a marvel of physical perfection that the Eye-See boys at Memphis called him "The Health Trust."

"I reckon," said Bledsoe's fireman, Jack Manting, "that your brotherhood never will have to pay you an allowance for sickness. It would seem to me that you're too

blamed healthy, Bledsoe."

"I've been railroadin' for twenty-one years," replied Bledsoe, "and I've been a member of the B. L. E. for ten years. I've never had to accept a cent of disability money."

Whereupon Bledsoe jumped up into his cab, and pulled out for Paducah. That night, when he returned to Memphis and looked after his engine, he said to Manting:



"Jack, I can't move my legs. I've known it ever since we struck the yard limits, and I thought it was only because my feet were asleep. But it's something more than that, Jack. Look!"

Bledsoe made a painful effort to step across the cab, but his legs wobbled woefully. The fireman had to lift Bledsoe from the cab, after which a number of roundhouse men carried him to the Eye-See hospital, where a doctor examined him.

"Bledsoe," said the doctor, "you're the last man one would expect to find with this disease. There's no apparent cause for it. You're not a drinker."

"But what is the matter with me, doctor?" asked Bledsoe.

"Locomotor ataxia."

"You mean locomotive ataxia. Well, what am I in for?"

"You've got one hope of getting mended so you can walk same as ever. That's from treatment by some osteopath."

For weeks after that, every Sunday, the Eye-See boys called at the hospital to see Engineer Bledsoe, who had always been a mighty popular man.

"I've got locomotive ataxia, boys," he would tell them. "You fellers that work on locomotives had better look out, or you'll get it too."

"But what do we have to do to keep away from this here locomotive ataxia?" his friends would ask.

"Well, you see, boys, you mustn't keep your legs too still when you're ridin' in your cabs. You must keep your legs wigglin' most of the time. If you do that, you won't get locomotive ataxia like I've got."

For weeks after that, firemen noticed that the men at the throttles, out of Memphis, kept their feet wiggling—on the sly, when they thought their firemen weren't looking.

Time passed, Bledsoe disappeared from Memphis, and Eye-See men wondered what had become of him. One day an engineer, who had been taking a holiday and improving it by traveling through Missouri, returned and said:

"I've found Will Bledsoe, boys. Found him at Kirksville, Missouri, on the Wabash. He's got a store there, the dinkiest little place in mercantile history.

"I put in part of my vacation," he continued, "taking a treatment at a sanatorium at Kirksville. There was an osteopathic college run in connection with the sanatorium, and, on the first day of my arrival, what do I see, opposite that college, but a little shop

with a big sign on top of it, readin': 'Will Bledsoe.'

"Wonder if that's our Will Bledsoe that got the locomotive ataxia?" I asked myself. And then I went over to the store to take a look. Painted on the side of the shop were these announcements: 'Dealer in Medical Text Books, Candies and Cigars, also Soft Drinks, and Stationery Sandwiches.'

"Well, boys, I took special note of the 'stationery sandwiches'—and in just a minute I'll tell you what happened to that sign.

"I entered the shop. No one was there. I waited. In a moment in walks a young chap, who weighs himself out a pound of candy, wraps it up, puts some money on the counter and walks out.

"Pretty soon another young chap comes in, helps himself to six cigars, lays a quarter on the counter, and takes his leave.

"Next comes a kid with a bundle under his arm. He opens it, takes out a string of sausages, lights an oil-stove over in the corner, cooks the sausage and puts them back in the paper. Then he slices off a lot of cold ham, cuts up half a loaf of bread, and makes the tow ingredients into sandwiches. After which he puts some coin on the counter and starts to walk out.

"Then I says:

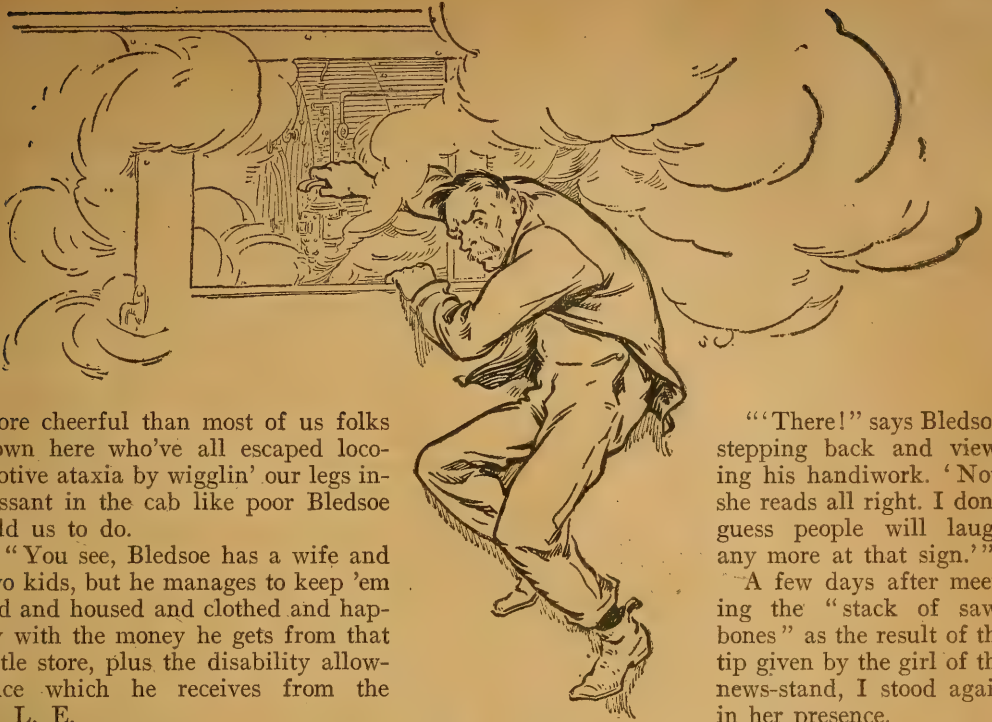
"What-all kind of a place is this here shop, anyway?"

"It's Bledsoe's," the kid answered. 'He can't walk much, and he's here in the shop only part of the day—because he's got locomotor ataxia. This is the littlest shop in Missouri, but it's got more clerks than the biggest department-store over in St. Louis. This shop's got at least six or seven hundred clerks.'

"Now, whatever do you mean?" I asks.

"I mean," he replies, 'that we students in the osteopathic college and the patients in the osteopathic sanatorium recognize the helplessness of Will Bledsoe, who supports his family by running this shop. So we come in here and help ourselves to anything we want, and leave the money. You see, Bledsoe is taking the treatment at the hospital, and that keeps him absent from the store.'

"Well, now, boys," went on the engineer, "when I hears all that, the tears come mighty near the surface, and I asks where Bledsoe lives. Then I goes down street till I finds his house. Yes, there was Bledsoe, with all his locomotive ataxia still in his legs, so that he could only drag 'em along behind him like they was two balls and chains he was haulin'. And cheerful? Say, he was



more cheerful than most of us folks down here who've all escaped locomotive ataxia by wigglin' our legs incessant in the cab like poor Bledsoe told us to do.

"You see, Bledsoe has a wife and two kids, but he manages to keep 'em fed and housed and clothed and happy with the money he gets from that little store, plus the disability allowance which he receives from the B. L. E.

"Now, what I say, boys, is that Will Bledsoe is a true hero of great fortitude and courage, and I vote that we goes right down-town and mail Bledsoe a lot of post-cards with our sentiments written onto them."

"I know what I'll say on mine," said one of the Eye-See engineers. "I'm going to write on mine: 'Dear Will: What's a stationery sandwich?'"

"What do you mean?" asked the traveler who had discovered Bledsoe at Kirksville.

"Didn't you say his sign on the side of his store read: 'Stationery Sandwiches?'"

"Oh, yes, I forgot to tell you about that. I told Bledsoe about it, and he laughed in guffaws that could be heard clean down the street to the osteopathic college. He hobbles down to the shop with him then, and as soon as he goes there he takes a paint-brush and hobbles outside and begins work on that sign, saying:

"I never noticed before that this here sign reads incorrectly. I see now what's the matter with it. It is ridiculous the way it is, isn't it? The darned things is spelled wrong. It should read this-a-way."

"And Bledsoe daubs out the 'e' in stationery and puts the letter 'a' over the daub, so that the sign then read:

"Stationary sandwiches."

"SEAB PUT HIS WELL-BOILED ARM INTO THE STEAM."

"There!" says Bledsoe, stepping back and viewing his handiwork. "Now she reads all right. I don't guess people will laugh any more at that sign."

A few days after meeting the "stack of sawbones" as the result of the tip given by the girl of the news-stand, I stood again in her presence.

"Seen the crowd?" she asked. "No? Then, go out to the end of the train-

shed, and you'll see the whole population of New Orleans. Some's in autos, some's in carriages, some's afoot, some's on mules, some's colored, some's white, and some's—"

"What's doing?" I interrupted.

The Stork Train.

"They're waiting for the 'Stork Train.'"

"Stork Train?"

"Yep. Stork Train. An Eye-See train's coming in with a special car full of babies from New York consigned to New Orleans folks that haven't any babies of their own, and are going to adopt the car-load."

A half-hour later I stood in the midst of a cheering crowd of men and women at the outer end of the train-shed as the Stork Train pulled in with its car-load of babies. There were about sixty babies in that car, aged from eighteen months to three years, all from the New York Foundling and Orphan Asylum. People in New York didn't seem to want babies, while all New Orleans seemed to want babies mighty bad.

"Number forty-four!" shouted Joe Butler, the asylum man in charge of the car, as he took a red-haired youngster from the arms

of one of the trained nurses. "Who's got the ticket for number forty-four?"

"Here!" came the answer. A middle-aged man, with a countenance that gossiped of extreme embarrassment, got out of an automobile, came forward and took possession of number forty-four.

"Number eleven!" shouted Joe Butler, taking a black-haired two-year-old from a nurse's arm. "Who's here for number eleven?"

"Me!" yelled a young woman from a place in the densest section of the crowd.

"Give that woman a chance to come forward," shouted Joe Butler.

"Ain't it cute!" fairly shrieked a Creole lady, as the young woman received the little one and nearly suffocated it with a series of foster-mother kisses.

Just then a man at my elbow said: "Hallo, Gil."

I turned. "Why, hallo, Gil," I responded.

It was Mr. Gilbert, a traveling Pullman inspector whom I had met two years before on the Florida East Coast Railway. We talked of babies, of course, since babies were now crying all around us, in the midst of engine-bells and whistles and escaping steam and the yells of the crowd every time Joe Butler appeared on the car-platform with a new kid.

"Yes," said Mr. Gilbert, "babies and children play their part in railroading. I was on an Illinois Central train, out of Springfield, Illinois, back in September, 1908, when we ran into an open switch at Divernon.

"The engineer of that train was Alf Shell. The fireman, Ed Taylor. In the Pullman in which I was riding was Ethel Barrymore, the actress. As the train rounded a curve, Miss Barrymore, sitting by the window, suddenly cried in horror:

"There's a child on the track!"

"She jumped up, terribly excited. She could not see up the track now, the curve having given her only the one swift glimpse in which she had seen the child. She seemed to be holding her breath now, expectantly.

"Meantime, Alf Shell had tooted his whistle frantically—and now, next instant, both Miss Barrymore and I saw the child, a little girl, walk through a gate into a yard beside the track.

"But just then came a fearful crash—and the next thing I knew I was thrown violently to the floor, while Miss Barrymore was hurled against the opposite seat.

"For a second, all was still. Then came

wild, frenzied shouts. Passengers were climbing out of the windows. Others were praying. Some were laughing hysterically. Miss Barrymore sat perfectly still and calm, but with a look of horror in her face.

"I wonder how many graves were filled just then?" she said.

"Come out and see," I replied.

"I tried to get out by the door. It was jammed. I dropped out of a window, and, while the porter assisted Miss Barrymore from the inside, I helped her through the window from the outside. I left her standing there and hurried forward to see 'how many graves had been filled.'

"I found that the train had run into an open switch, and that Engineer Alf Shell and Fireman Ed Taylor had jumped just after blowing the whistle so frantically to warn the child on the track. Both the enginemen were injured, but that seemed to be the total of casualties.

"The engine had plunged into a ditch and was reduced to scrap.

"No one's hurt except the engineer and fireman," said the conductor.

"Just then I heard an agonized scream. It came from the yard into which Miss Barrymore and I had seen the little girl walk after stepping from in front of the train. I can see Miss Barrymore standing in that yard now, with her hands to her face, her whole attitude one of horror and pity. That scream—no, it was not the actress who had screamed. It was unmistakably the scream of a mother. Only a mother could give such an agonized cry as we had heard.

"With the conductor, I rushed into the yard. The little girl lay there—dead.

"Her name was Bettie McGuire," said Miss Barrymore, wiping away her tears. "I gathered that from what the stricken mother said before she began raving like you hear her now."

"The mother, on her knees beside the dead child, seemed to have gone suddenly mad. With her arms uplifted, she cried over and over:

"God have mercy upon us and incline our hearts to keep thy law!"

"While the crazed mother continued reiterating this prayer, the injured engineer was carried into the yard and laid on the ground beside the lifeless child.

"I'm so glad I didn't hit her," he said, not comprehending that the child was dead. "Thank Heaven, I saved the kid."

"Just then men carrying Fireman Taylor entered the yard. Taylor heard what the en-

gineer said, and noticing that the child was not alive, as the engineer supposed, put his finger on his lips and cried: 'No!' just as one of the men was about to tell the engineer the truth. The fireman then beckoned to us to come nearer to him and he whispered:

"Don't tell Shell about the kid—or he'll never recover from this. He is mighty fond of kids. Don't tell him the truth?"

"Before Fireman Taylor finished his warning, Ethel Barrymore knelt over the injured engineer, Shell, and I heard her saying to him:

"Number fifty-nine!" shouted Joe Butler, holding up one more little one. The crowd flung laughter up to the roof of the train-shed, and Pullman Inspector Gilbert, standing beside me, cried:

"Hanged if it ain't a piccaninny!"

The Jo-Jah Lad Who Stayed.

Seab Davis, Georgia Railroad engineer, with a run between Atlanta and Augusta, came home with his hands skinned down to raw beef, his face boiled to a lobster-red, and with the hair of his head singed down to



THEY HAD STEPPED INTO A WASHOUT THREE FEET DEEP."

"Yes, yes! The little girl is all right. You saved her. She's perfectly happy now."

Here Inspector Gilbert, of the Pullman Company, stopped short. I could see that he couldn't say more.

"Number thirty-five!" cried Joe Butler from the rear platform of the Stork Train, as a trained nurse put another child into his arms. "Who's here for number thirty-five?"

As a happy-faced man and woman came forward to claim number thirty-five, I turned again to Inspector Gilbert, and said:

"But what killed little Betty McGuire? Surely she was not hit by the train, for you and Miss Barrymore both saw her toddle into the yard."

"She was killed," he replied, "by flying fragments of Alf Shell's demolished engine when it plunged into the ditch."

a shortness that made him look as if he had been the victim of an Apache buck.

A Southern Railroad man, at New Orleans, told me the story:

"Just before Seab pulled into Clarkson, Jo-Jah, on his run that day, suh, he suddenly became fully aware that something had happened to his engine. He saw his fireman land in a heap on the tender; heard a ripping and banging all around him; saw the cab getting knocked to smithereens, and then—the steam-gage and steam-pipes let loose and Seab found himself in the midst of scalding steam worse'n any Russian bath attendant ever unloaded on a fat man.

"Drivin'-rod broke? You hit it right, suh. And when a drivin'-rod breaks in one of these modern engines, the men in the cab should be good and ready for the next world.

"Well, suh, what did my Jo-Jah engineer friend do? Did he jump for his life and let the train wreck itself to suit itself? No, suh. Seab Davis stayed. With his face and hands scalded, he crawled out of the window and hung onto the outside of the cab till the escaping steam had abated. He didn't wait long, however, for a smash was due at any second. So, with the cab filled with scalding steam and while the broken rod was pounding away, Seab put his already well-boiled arm into the steam again, found the air-brake, jammed on the air and stopped the train.

"That, suh, is how a Jo-Jah engineer averted a wreck and saved the lives of many passengers."

The Sixth Sense.

"The sixth sense," said a Louisville and Nashville man, at the L. and N. station in New Orleans, "is what makes a good engineer. Unless he possesses it, he'll be having accidents all the time and his engine will frequently need the shop. I'll bet no engineer can define that sixth sense in words. We who possess it simply know that we can feel the track and road-bed under us, that we can hear, see, and feel things about the machinery—things of which the fireman may have no knowledge. I'm going to show you how one of our engineers, Charlie Wilson, who pulls the Washington-New Orleans Limited between Montgomery and Mobile, proved the possession of his sixth sense.

"One night in March, 1908, Charlie Wilson was pulling his all-Pullman train down to Mobile. As the train rushed along, he said to his fireman:

"Did you feel something just then?—as if we had dipped in and out of a hole?"

"Hole nothing," exclaimed the fireman. "What do you think this road-bed is? a sieve? a broiling-iron?"

"Wilson kept perfectly quiet after that as mile after mile was run off, but all the time he was exercising his sixth sense. He didn't look or listen or smell or taste or touch, but he just let his body be a part of his machine. Twice again he was conscious that the engine seemed to dip in and out of a hole, the last one so deep, as it were, that he put on the emergency and stopped.

"What's wrong?" asked the fireman.

"There's something wrong with this road-bed—I don't know just what," replied

Wilson, as he lighted a torch, climbed down from the cab and walked slowly up the track.

"Up came the conductor, wanting to know why Wilson had stopped the crack train on the line in the middle of nowhere and for no apparent reason.

"I don't know why I stopped," said Wilson. "But I'm not going on till I've examined this track for a mile ahead."

"You're crazy, Wilson," said the conductor, as he walked beside the engineer.

"Sure he's crazy," concurred the fireman, who was accompanying them on the trip of inspection.

"They had proceeded perhaps five hundred yards when—splash! They had stepped into a washout three feet deep and fifty feet long.

"Well, am I crazy?" asked Wilson.

"No! You're a he witch," replied the conductor. "How'd you know of this?"

"Sixth sense," said Wilson.

"What's that?" the fireman asked.

"Ask the psychologists," replied Wilson. "I've got it and they haven't, yet they can tell you what it is, while I can't."

"Wilson backed the train to a siding and reported the damage to the track—then waited till the wreckers came up from Mobile and bridged the washout.

"Meantime, the passengers slept on, knowing nothing of the cause of the delay till morning came and the train resumed its run. Arriving at Mobile, a committee of passengers called the engineer down from his cab.

"Mr. Wilson," said a Bernstein, the spokesman, "in behalf of the passengers on this train, I want to thank you for what you did last night. Your judgment and coolness undoubtedly saved the train from a terrible disaster. But for you—I don't know exactly what you call it—we would have run into that washout and many of us might now be dead or injured. Also, on behalf of the passengers, I wish to tender you this purse as a token of our appreciation."

"Wilson accepted the purse and made a simple reply that he had only done his duty.

"When he got to the roundhouse and opened the purse, he whistled in astonishment and then smiled. Turning to a group of engineers, he said:

"If any of you fellows own a sixth sense, just you use it to the limit on every run. Take it from me—there's money in it. Last night the proceeds of my sixth sense netted me a sum equal to two months' pay!"

75 MILES IN 28 MINUTES.

BY MERRITT CRAWFORD.



HE seven-ten local from Sayre had pulled into the station at Geneva, and "Big Jim" Haughes, the engineer, was leaning out of the cab, waiting for the passengers to alight before taking her to the yard. It was the end of the run, and the prospect of a hot, appetizing meal to a tired, hungry man, after a hard day at the throttle, is alluring.

Haughes glanced back impatiently as the crowd began to thin out on the platform, but did not get the signal to pull the local to the siding. Then he saw that the conductor was talking with the operator, who had just come out of his office, and, as he looked, both turned and came toward him. The latter had a despatch in his hand. He held it out toward "Big Jim."

"I guess you don't get a hot supper to-night, Jim," said the operator, grinning, as they neared him, "unless you can pick it

out of the gravel between here and Manchester."

The big engineer swung lightly down from the cab, and mechanically took the despatch from the operator's hand.

"Engine 527 will run extra to Manchester, and await orders," it read. It was signed by Dawson, the division superintendent.

"It's a six-car vestibule special," explained the operator, as Haughes looked interrogatively at him, "the one they've been talking of trying to have compete with that new nine-hour train of the Central's."

Haughes nodded. For weeks every engineer on the Lone Star Valley Railroad had been expecting that the company would try the experiment, and few of them relished the idea of being made the goat, for, with the curves and grades of the Valley, a ten-hour schedule between Buffalo and New York, much less one of nine hours, seemed an impossibility.

"I wish Dawson had picked some other man than me for the job," said Haughes, as he climbed back on the foot-board, taking advantage of the engineer's time-honored privilege to grumble at the thought of a lost supper. "There's nothing but a call-down in it for any one, if you can't make the schedule, and explanations to make if you take chances. I'd rather let some one else have the glory."

The others smiled. Jim Haughes was known from end to end of the system as one of the most daring engineers in the road's employ. Both the conductor and the operator knew that he would have been the most disappointed man on the Seneca Division if the super had assigned the run to some one else. While he might be outwardly fretted, "Big Jim" exulted.

"Well, good luck to you, Jim," said the

conductor, who had not yet spoken, after a pause. "If old 527 can't bring that special through on time, there isn't another engine, between here and Buffalo, that can." He glanced sharply down the empty platform, and gave the signal to "go ahead."

Five minutes later, having switched the local to its accustomed siding, 527 was eating up the miles to Manchester. At Manchester, Haughes, and Stebbins, his fireman, had hardly got 527 off the turntable before Dawson, the division chief, came up.

"Rochester wires that the special left there eighteen minutes late," he said, "so she'll probably lose four or five minutes more on the grade between here and Mendon. How much of that do you think you can make up, Haughes?"

"Big Jim" set down the oil-can he had been using, and looked critically over his engine before replying. After his grooming, 527 sputtered and gurgled skittishly, as though impatient to be off.

"I'm not promising anything, Mr. Dawson," he said slowly, after a moment's thought; "but, if we don't lose too much time between here and Geneva, we'll make up some of it all right. Only give me a clear track from Burdett on."

"The special has the right-of-way over everything," said Dawson, casting a satisfied eye over 527's shining brasses; "so it's up to you to make up what you can."

With another nod he turned and went back toward the telegraph-office. Haughes shrugged his shoulders as he gazed after him.

"As usual, Harry," he repeated, somewhat cynically, to the fireman, "it's up to us."

Stebbins grunted his concurrence in the opinion. He did not believe in wasting words, and just then he was busying himself with a final examination of 527's intricate anatomy.

"She's O. K., Jim," he said, a moment later, as he crawled from beneath the engine, "and ready for the ninety miles to Sayre."

Haughes held up his hand with a warning gesture.

"There's the special blowing at the crossing three miles this side of Farmington," he said, after listening a moment; "she'll be here directly."

True to Dawson's prediction, the special had lost more time before its arrival at the end of the division; and when Haughes and the 527 pulled out of Manchester, there were exactly twenty-three minutes to make up.

It was a short run of fifteen miles to Geneva, their only stop, but it was a sharp up-grade all the way. Haughes knew that, unless 527 could hold her own for the distance, it would be difficult to make up much of the time the engineer of the Buffalo Division had lost.

From Geneva to Burdett is a distance of thirty-five miles, with a steady, gradual rise of approximately forty-two feet to the mile; but if 527 was steaming well as they pulled out of Geneva, "Big Jim" had few fears for this part of the run.

After Burdett, it was down-grade for the thirty-nine miles to Sayre, the other end of the division—a straight track with a single bad curve. It was on this stretch that Haughes counted to make up most of his time.

Seven minutes after leaving Manchester they passed through Clifton Springs with a roar that wakened the echoes of that peaceful watering-place.

A glance at his watch told Haughes that his engine had made the five and a quarter miles in schedule time, while the indicator showed that she still had plenty of pressure in reserve. He was saving it, for he knew that the next ten miles would be the hardest of the run.

Up and up they climbed with undiminished speed, as notch by notch "Big Jim" coaxed his engine, shrieking and protesting like a living thing, to the limit of her powers. Behind the fire-box Stebbins toiled, with the light glowing ruddily upon his sweat and grime streaked face. More an automaton than a man he seemed, as with swift, certain movements he fed the fuel that gave 527 her life and power.

Through Phelps and Oaks Corners they sped, while the station operators, timing their passing, cheered them on wildly. As they entered the yards at Geneva, Haughes again looked at his watch, and almost as he did so brought the special to a stop before the station. They had gained one minute.

But here a delay was encountered. A large funeral-party, waited on the platform to board the special, and a hasty glance at the gage showed that 527 must have water before another twenty miles, or they would be in difficulties. There was no alternative. It was directly against orders for any train to tank up at Geneva, and it meant a thirty-day "lay-off" for any engineer or fireman to violate this rule.

Haughes and Stebbins were out to make up time. A stop for a plug at any station

beyond meant further loss, and Haughes did not mean to stop this side of Sayre.

"I guess we'll have to chance it, Harry," he said to Stebbins. "Maybe we'll need a month's vacation after this trip, anyway. At least, we'll give those mourners"—he indicated the funeral cortège, then slowly boarding the train—"enough excitement in the next seventy-five miles to make 'em forget what they came for."

Stebbins grinned approvingly at his chief.

With a twist of his hand, the cool waters gushed into the almost empty tank. An instant later Haughes pressed down the injector, and 527 fairly hissed her gratitude. Then, with two preparatory snorts, when the conductor gave the "Go ahead" signal, her drivers began to revolve, and she was off again for the last and longest lap of her killing race against time.

They had gained a minute in that record climb from Manchester; but, what with the funeral-party and the necessary tanking up, this minute had been lost, and five others besides. As they cleared the platform, Haughes saw that the special was twenty-eight minutes behind the schedule. It was now or never.

The 527 was steaming well, but obviously not yet doing her best. As they passed through Varick, seven miles out of Geneva, not a second had been chipped off their handicap. Haughes called to Stebbins, and a moment later, with a shower of glowing sparks spouting from her stack, the engine responded to his hand.

At Kendaia, the next station, they had gained forty seconds; at Gilbert, two minutes; and at Hector, four stations beyond, the special had just twenty-three minutes to make up—exactly where they had started from Manchester.

Five miles beyond lay Burdett, and from this point it would be easy running. In the next forty-four miles twenty-three minutes must be gained, if human skill and daring could accomplish it.

With a rush, her flying wheels driving a cloud of dust skyward, the special thundered through Burdett, with three minutes clipped off the twenty-three that had burdened her at Hector. Haughes saw a little knot of men, on the platform under the station lantern, toss their caps into the air as he approached.

After that, Haughes saw nothing but two shining rails that glimmered and vanished into the inky blackness far ahead. He dared not look aside.

Trees and telegraph-poles, rocks, fences, and hedges, houses with their gleaming windows, and white, twinkling mile-posts, all merged into one indistinguishable blur.

In the coaches behind, sleep was impossible. The funeral-party and the other passengers sat silent, or talked excitedly together, a prey to nervous apprehension.

A hundred anxious queries had been hurled at the conductor until, at last, he had sought refuge in flight.

Was there any danger? Was the train

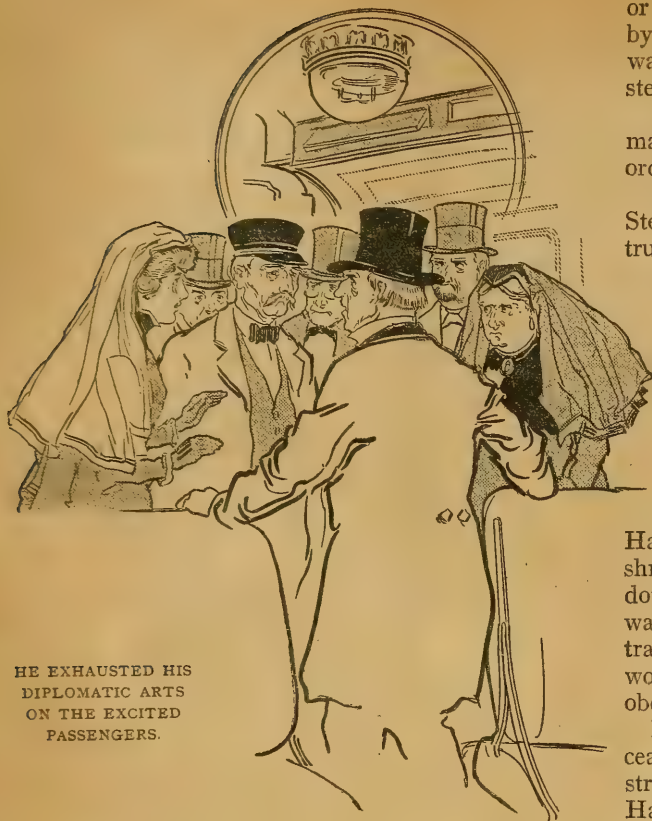
running away? Had the engineer lost control of his engine, or had he suddenly dropped dead, as they had heard engineers sometimes did? What possible excuse was there for such excessive speed? It was beyond the bounds of all reason. What right had a reckless engineer to imperil their lives for the sake of a few minutes, about which nobody cared?

These and many other questions were flung at the conductor, who replied as soothingly and reassuringly as possible, but never once did his hand reach upward for the rope overhead. He knew "Big Jim" Haughes, and fancied perhaps that, even had he done so, his signal would have been ignored. When a train is late, it is for the engineer to worry, not the conductor; and "Big Jim" was out to make up time. Realizing this, and having exhausted his diplomatic arts on the excited passengers, he wisely retreated.

Up ahead in the cab, ignorant of the turmoil behind him, Haughes was making rapid mental calculations. The special was



'I WISH DAWSON HAD PICKED SOME OTHER MAN.'



HE EXHAUSTED HIS
DIPLOMATIC ARTS
ON THE EXCITED
PASSENGERS.

nearing Van Etten Junction, and between that point and Lockwood, the next station, lay the most dangerous curve on the entire division.

Just around it was a block and a siding, neither of which could be seen until the curve was completely cleared. Somewhere between the special and Sayre were two second-class merchandise freights—symbol trains—and the question in Haughes's mind was whether they had tried to make Sayre ahead of the special, or had been held out at the Lockwood siding.

If the former was the case, and the conductors of the freights had every reason to suppose they had plenty of time, a collision was almost inevitable. Everything rested with the tower-man. If he had not held them out before 527 had rounded the curve, the special would be upon them. Yet, if he slackened speed by the smallest fraction, they could not make Sayre on time.

In the flash of a moment Haughes made his decision.

There were thirteen miles yet to go, and but nine minutes to make them in. If the block was clear he meant to make them, but, clear

or not, he would not close his throttle by a notch until he knew. The 527 was steaming as she had never steamed before.

"Big Jim" beckoned to his fireman. The roar of the engine made ordinary speech impossible.

"Harry," he shouted, close to Stebbins's ear, using his hand as a trumpet, "give me the block—coming into Lockwood—from the other side of the cab—with your—lanterns!"

Stebbins nodded and made ready. From the opposite side of the cab the semaphore could be seen an instant before they cleared the curve.

As they left Van Etten Junction, three miles from the block, Haughes opened up his whistle. It shrieked and reverberated up and down the length of the valley—a warning to the crews of the symbol trains, then hurrying into the Lockwood siding that was not to be disobeyed.

Not for an instant did the 527 cease her discordant wailing until she struck the curve. Only then did Haughes release his hold of the rope, shifting his gaze from the track ahead to the figure of his fireman opposite. The next ten or twenty seconds would tell the tale for both of them.

Although it was the smallest fraction of time, it seemed an age to the waiting engineer before Stebbins gave the signal. An instant of tense watching, and then—high above the fireman's head—flashed the red lantern. The block was up. The freights must be on the main track—dead ahead.

The cry on "Big Jim's" lips crumbled away to a whisper as instinctively his hand shot out toward his levers; but even as it did so, with a single, spasmodic movement, Stebbins jerked the red lantern downward, and swung the other savagely high against the roof of the cab.

The block had cleared.

Out of the cab of the 527 two angry faces glared at the tower-man frantically waving his green lantern, while he still sought to clear his fouled semaphore. On the siding the green tail-lights of the symbol trains twinkled an instant as their crews cheered "Big Jim" and the special racing past. They had reached the siding with hardly a minute to spare.

Again 527's whistle shrilled a warning as they neared the railroad crossing at East Waverley; and as the special shot through the two-mile-long yards at the Junction, it sent forth a wild slogan of defiance and victory. The race was over. As the train rumbled into the station at Sayre, a crowd of townspeople and railway officials waited on the platform.

"On time—to the second—with twenty-eight minutes made up between here and Varick—best run ever made over the Seneca Division," was the burden of their ejaculations.

Haughes and the 527 had won. As he and Stebbins clambered a little unsteadily from the cab, the crowd swarmed round them with congratulations. Both seemed to be dazed.

"Don't you know that you've broken all records on the division—that you made the last thirteen miles from Van Etten Junction

in exactly nine minutes?" asked one of the admiring group around Haughes, at a loss to understand his silence.

"Big Jim" turned limply and wearily toward the speaker. He was thinking of the symbol trains and the fouled semaphore.

"Yes, I know it," he rejoined hoarsely; "of course I know it—but I don't care a hang about it. Let me get out of here, so I can go somewhere and lie down. I'm tired."

In the morning, however, after a night's rest, when Dawson congratulated him on the run, and informed him, moreover, that the Seneca Division alone had brought the special through on schedule, I think you will agree with me that "Big Jim" did care more about it than he had previously acknowledged. Especially when neither he nor Stebbins ever heard anything about their disregard for orders in tanking up at Geneva.

FIREMEN WHO STUDY TO SAVE COAL.

ANOTHER railroad to recognize the important part that a school for firemen plays in keeping down fuel expenses, is the Lehigh Valley.

When a man is employed as fireman, he receives a list of questions upon which he is examined at the end of his first year of service. Later he receives another series for mastery during his second year, and then, finally, a third series for his third year. He is not expected, however, to work out all the problems himself, for several aids have been established for him.

A copy of a book on fuel and steam economy is put into the hands of every fireman who enters the service of the company, and regular instruction in the operation of air-brakes is provided. The management of the company has appointed assistant road foremen, whose special duty is to give instruction in the proper and economical use of fuel. Moreover, every fireman is invited to apply to the master mechanic, general foreman, road foreman of engines, and the general air-brake and fuel inspector, or to any other official, for information upon any matter in connection with his work.

When he takes the examination, which forms a part of the educational scheme, the fireman must make a high record to pass. In the first two series of questions an average of 75 per cent is required, and in the last series an average of 80 per cent. He may feel sure, though, that no catch questions will be put forward to puzzle him. They will be all thoroughly practical. Here are a few examples:

How should a fire be built up before starting? How often should fresh coal be applied to a fire? If a hole appears in a fire how should it be treated?

State as fully as you can just when the blower

should be used. What is the result if the blower is left on too long?

In making station stops, should a fresh fire be put in at shutting off or at starting? In approaching long down grades how should the fire be handled?

Should an injector be left on continuously throughout a trip, or be put on and shut off at intervals? What attention should a fire receive when the injector is working? What is a safety-valve? How does a safety-valve operate?

When and how often should the grates be shaken? Does an engine popping affect in any way the amount of coal used per trip?

What effect does the stopping up of flues have on a fire? How can this be overcome?

If you should open a fire-door and discover a dull or red fire, what would you do? Why? If an engine burns the fire at one side or at the back end of the fire-box, what is wrong?

What is an ash-pan? Should air be admitted to the grates through the ash-pan? If a fire appears in an ash-pan, what is the cause?

What is the object of a locomotive water-glass?

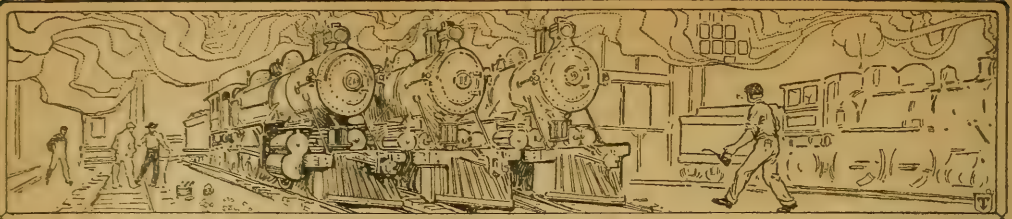
What is a clean fire?

What is the difference between a wide and a narrow fire-box engine?

What is a stray bolt? What purpose does it serve?

Name all the important parts of the air-brake equipment as applied to a locomotive? What is an automatic brake? How is an automatic air-brake applied. How is it released?

What is meant by emergency position, or an emergency application? What is the proper method for bleeding off a brake? What is meant by cutting out a brake?



THE ROUNDHOUSE FOREMAN.

BY GEORGE FOXHALL,

Author of "Love-Song of the Rail."

Written for "The Railroad Man's Magazine."



HERE'S a most convenient party

Works at our division point.

He's the man who takes the labor and the blame;

He's the man who gets the raggin' when the things are out of joint,

And it's Mr. Roundhouse Foreman is his name.

He's only just past forty,

But his hair is turning gray;

It happened in the six months he's been here.

We are confidently betting we can turn his mind astray
By the time he's been the foreman for a year.

Do you see those feet a wavin'

From that steam dome? Yes, you bet,

They're certainly a goin' with a vim;

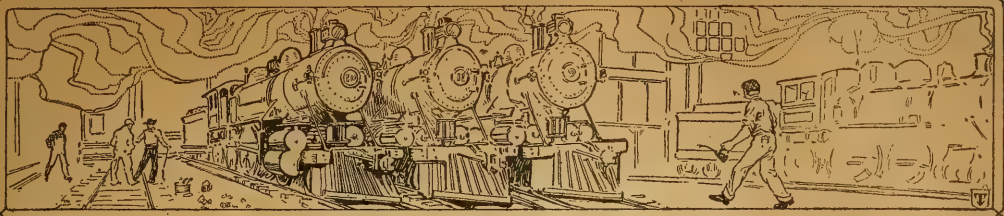
There's a delicate connection that no other man can get
But the foreman—an' those feet belong to him.

And from mornin' until evenin',

And from evenin' until dawn,

The same old cries are ringin' in his ears:

"Say, these tires on No. 90 are as flat as any lawn,
An' the way she hops would move a toad to tears."



It's, "Have you fixed that pop-valve?"

And "What about those flues?"

Or, "That left-side main-drive axle-box is tight!

The way that durned injector works would give a jay the blues!"

And "Them pistons are too loose to take a bite."

Oh, *we* don't wait for something

That could really, truly be.

What's imagination given for but to use?

We're as full of whims as women; if mechanics are at sea,

We explain our wants with satire or abuse.

"Hey, the 247's tender

Should be covered in with wire;

She shakes her coal out on the right-of-way."

"The 27's crown-sheet is too close up to the fire—

What's that about a hotter fire, you say?"

"The old 96 is lying

With her wheels turned to the sky,

The way she's twisted up is just a shame;

An earthquake did the damage, but—you bet your piece of pie—

They say the roundhouse foreman is to blame."

But, in spite of all the failings

That we must admit are his,

We stand by him in his dark and stormy hours;

An' if we do abuse him, we admit he knows his biz,

An' when he dies—we're going to send some flowers.



THE NEW HOME FOR AGED AND DISABLED RAILROAD MEN RECENTLY BUILT AT HIGHLAND PARK, ILLINOIS. THE PORTRAIT IN THE UPPER CORNER IS THAT OF JOHN O'KEEFE, THE MANAGER.

A Home for Aged and Disabled Railroad Men.

BY FRANK S. HOWE.

THE bugbear of helpless or infirm railroaders who have grown old in the service of their companies, or been rendered unable to earn a livelihood by sickness or injury, is no more. The four great brotherhoods have united for the protection of members who might become public charges in case misfortune overtakes them. The new home at Highland Park, Illinois, will prove a welcome haven to many who have been rendered incapable for work.

While a number of the railroads have adopted pension systems for the support of their veteran employees, there are many cases where the old-timers are not so well provided for, and to them the home is indeed a blessing. The fact that there are only seventy-seven inmates in the new institution tells the remarkable story of the ability of railroad men to keep their heads above the waters of helplessness. It indicates a tendency toward thrift of which any other class of men might well be proud.

What the Brotherhoods Have Done to Safeguard Their Aged Comrades Against the Rigors of Fate in the Helplessness of Old Age.



AT picturesque Highland Park, Illinois, twenty-three miles north of Chicago, on the majestic bluffs overlooking Lake Michigan, stands a living monument to the railroad man's generosity—the new Home for the Aged and Disabled Railroad Employees of America.

The society through whose efforts this shelter for the helpless brothers of the rail was built was organized in 1890, its object being to provide for worthy, aged, and disabled railroad men who are members of the four railway brotherhoods—namely, the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen and Enginemen, the Order of Railway Conductors, and the Brotherhood of Railroad Trainmen.

The original idea had its inception in the mind of Dr. Frank M. Ingalls, a former railroad employee, during the above-named year,

who, in the discharge of his duties as a physician, discovered a member of his brotherhood in the almshouse of Cook County, Illinois.

Where the Idea Originated.

Inspired by a desire to benefit the man who was ill and in need of assistance, and appreciating the stigma cast upon his brotherhood by allowing one of its members to become an inmate of a public poorhouse, he conceived the idea of establishing a home where members of all the brotherhoods might receive the comforts and care of a home when no longer able to withstand the hardships and exposure incident to their employment, and perhaps, with proper care and nursing, be rendered able to take up some other line of industry.

The plan was first adopted in Dr. Ingalls's own home in Chicago. It met with almost instant approval and success, and during the following year, the modern physical require-

ments and standards for railroad employees having increased the number of indigents among the ranks, the home was permanently installed in beautiful Highland Park.

The original home there consisted of several wooden structures, which housed the inmates for nearly nineteen years, but increasing calls for assistance, and a perfect understanding of its samaritan purposes by the various brotherhoods, made it possible to dedicate the new \$125,000 home on April 12 of this year.

A Pleasant Location.

The management and control of the home is invested in a board of trustees, made up of representatives of each of the four railroad organizations. It covers about five acres of land, and is located at Beech and St. John Streets, Highland Park. The buildings face the main-line tracks of the Chicago and Northwestern Railway and the Chicago and Milwaukee Electric Railway.

Sheridan Road, one of the greatest automobile boulevards in the United States, connecting Chicago and Milwaukee, is two blocks east of the grounds, and Lake Michigan is only three blocks away; the lake shore at this point being a ninety-foot bluff, from the top of which an excellent view of the lake and the passing boats is obtainable.

The home consists of two buildings—the main structure containing the inmates and attendants, and the other the power plant and laundry. At the present time it supports seventy-seven inmates, at a monthly cost of about fourteen hundred dollars.

The Building Arrangements.

The main building, surrounded by a fine grove of hard maple, elm, oak, and hickory trees, contains three stories and a high basement, practically all above the ground, built in the form of the letter "T." The front part is one hundred and fifty feet long by forty-two feet wide, while the center extension is forty feet wide by sixty-two feet long.

The building is of a strictly modern style of architecture, the construction being absolutely fireproof throughout.

There are porches or sun balconies on each floor, ten feet wide by fifty feet long, which are easily accessible to all the inmates. The shell of the buildings is of red brick and Spanish tile.

The electric automatic elevator will carry its passengers from any floor to the recrea-

tion and card rooms in the basement in less than one minute. It has a separate entrance on one side, on the ground level, for the accommodation of those who are obliged to use wheel-chairs.

The main building contains eighty-six beds, besides the hospital, which will accommodate twelve beds. Each floor has a recreation and reading room. To the right of the entrance is the reception-room for guests, and in the extreme right end is the library, with bookcases for several hundred volumes. To the left of the entrance is the business office of the superintendent, connecting with a handsome private reception-room.

The main dining-room on the first floor has a seating capacity of twenty-four persons. Just off it is the superintendent's private dining-room, and connected with the kitchen is a dining-room for attendants and employees about the home. The menu served is above that of the average family.

For the Comfort of Inmates.

At the rear of the second floor is the entertainment-room. This valuable adjunct has a seating capacity for seventy persons, with room at the rear and in the aisles for the wheel-chair inmates. The chairs in this room are of opera style, facing a rostrum ample for all demands made upon it. On Sunday afternoons the inmates are entertained in this room by performers from the Highland Park and neighboring clubs and churches.

The heating plant and laundry is located in a separate building, two stories high, of the same fireproof materials used in the main structure. The boilers, fuel-room, and machinery-room are located on the first floor, and the laundry machinery on the second floor.

The management is designated under three heads—the officers, board of trustees, and board of managers. L. S. Coffin, of Iowa, is president. The board of trustees is made up of four members—William Kilpatrick, secretary board of railroad and warehouse commissioners of Illinois; L. Ziegenfus, P. H. Morrissey, and George Goding. The board of managers consists of Warren S. Stone, John J. Hannahan, P. H. Morrissey, A. B. Garretton, Frank P. Sargent, and nineteen others located in different sections of the United States.

The home is under the immediate supervision of John O'Keefe, who acts as secre-

tary, treasurer, and manager. Mr. O'Keefe is an old railroad employee, having entered railroad service in 1879, on the old Sault Ste. Marie and St. Paul Railroad, as a brakeman. He was later a passenger-conductor on the Chicago and Northwestern Railroad, and left that position to accept the management of the home.

Mr. Kilpatrick, who makes regular weekly visits to the home, is an old train despatcher and conductor, having spent thirty years in railroad service, resigning as conductor on the Northwestern to accept his present position on the warehouse commission.

Every officer in any way connected with the home has seen years of railroad service.

The only persons who draw salary or other compensation from the home are the secretary and treasurer and the regular attendants.

The construction of the new home was commenced July 1, 1909, and completed March 10, 1910. Any railroad employee in good standing as a member of any of the four organizations, who is incapacitated for work, is eligible to admission upon application approved by his lodge.

The entertainment-room, which is also used as a chapel, is open to all religious creeds. If an inmate should die at the home, if his body is not claimed by relatives, he is buried in the beautiful cemetery at Highland Park, the expense of which is borne

by the sustaining lodge of his particular organization.

The discipline at the home is, of necessity, not strict. Only such measures are taken as are necessary to insure safety and harmony among the inmates. The billiard and pool rooms are accessible at all times to the men.

The oldest member of the home is Jefferson Newell, the oldest living ex-employee of the Lake Shore and Michigan Southern Railway. His age is ninety-one. The youngest inmate is thirty-four years old.

A regularly appointed physician and surgeon has charge of all illness occurring at the home. All Chicago daily newspapers and many weekly and monthly periodicals are at the disposition of the inmates.

From a personal inspection and observation, the writer is justified in stating that the home is a lasting credit to the organizations which have so generously contributed to its construction and maintenance.

It depends wholly upon contributions from the numerous lodges throughout the country, but is not averse to contributions from outside charities which may be interested in the railroad man's welfare. John O'Keefe, the manager, is affable and kind-hearted, and railroad men may feel assured that the new home is in the hands of one whose natural instinct is the uplifting of humanity.

TOO FAST FOR THE HEADLIGHT.

"SAY, boys, you know the other night No. 3 was two hours late," says Papa Gould, as he turned the soft side of the bumping-beam up to sit on, behind the roundhouse stove.

"Well, I was called on time, and when I got to the depot they were reported on time; but up the line a-pièce at Rock Cut, there was a slide and I got them two hours late.

"As you know, old 27 is just getting in good shape since her last trip through the shop; so, I thought I would see what she would do and take a few minutes off the record. So I did not loaf along, but commenced looking at this roundhouse from the start.

"I had things in good shape, when my headlight began to grow dim. I told Jim to go outside and see what was the matter. He came back and said it was burning fine. At the first stop

for water I examined it myself, but could not find anything wrong. But after I got to going again it was the same thing over. So I examined it running, but could not see anything wrong.

"There was not as much light on the rail as a hand-lamp would make. I began to wonder what was the matter, and I bet you could not guess in a year what really was wrong.

"Cover down," says one.

"Dirty reflector," says another.

"Door open," says another.

"All wrong," says papa.

"Well, what was wrong?" says the roundhouse fireman. Nothing reported on it."

"Well," says papa, "the only thing I could think of was that we were going so fast that the light couldn't keep ahead of the engine."—*Locomotive Engineers' Journal*.

Clogged tubes might make fine fence-posts, but who wants fence-posts on a boiler?—Musings of the Master Mechanic.



The Railroad Man's Brain Teasers.

Clever Conundrums Intended to Circumvent the Cerebrum of Cautious Calculators.

IF you haven't forgotten your algebra, perhaps you can solve this one by R. R. Gaston, of the Mop, Loti, Kansas:

(7) Conductor Z starts out from A with a "drag." When he gets to B he sets out half of his cars and a half car more. At C he sets out half of what he has left and a half car more, and at D he sets out half of the remaining cars and a half car more. When he arrives at the end of his run he has five cars. How many cars did he start with?

Roy C. Cowan, Kansas City, Missouri, kindly contributes this:

(8) Three farmers, A, B, and C, buy a grindstone, each paying one-third of the cost. They are at a loss to know how to divide the stone, but finally decide to let A take the stone and grind off his part, and then turn it over to B. B takes off his part and then turns the balance over to C, the last part being C's part. What was the size of the stone when A gave it to B and when B gave it to C; also, how much did each man take off? The stone was 30 inches in diameter to start with.

Dan M. Powell, Black River, Washington, is the author of this one:

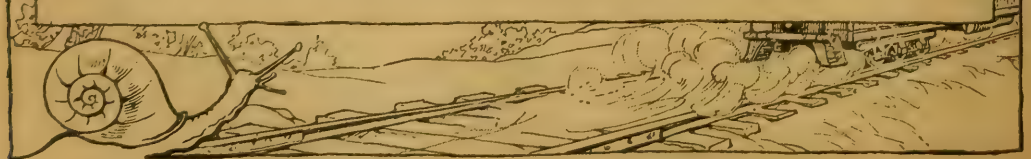
(9) A purchasing agent sent his representative to spend equal sums for Pullmans, common coaches, and cabooses. For each one that he purchased that was unnecessary he was to forfeit \$10. He found good cabooses at \$1,200 each, coaches at \$3,000 each, and Pullmans at two prices, \$7,500 and \$9,000, respectively. He took Pullmans at \$7,500 each. How much did he forfeit? How many of each kind did he purchase? How many should he have purchased in order to forfeit nothing?

ANSWERS TO THE SEPTEMBER TEASERS.

(4) Nine times as bright. The intensity of light received by an illuminated object varies inversely as the square of its distance from the source of light.

(5) Eight times as bright. Same explanation as No. 4.

(6) North-bound engine cuts off train at south end of switch, runs to north end on switch and backs in with bad-order cars. South-bound train then pulls down main line and stops opposite bad-order cars, then north-bound engine runs out on main track and stops sixty car-lengths north of north end of switch. Then south-bound engine backs in south end of switch and pushes bad-order cars out on main line to north-bound engine. South-bound engine then runs back over switch and backs south-bound train north to bad-order cars. Then south-bound engine goes down main line and pulls north-bound train up on main line opposite switch, then couples on to south-bound train, runs over switch out on main line at south end and high-balls, then north-bound engine backs bad-order cars in on side track, pulls out on main line, couples on to north-bound train, and high-balls.




PRESIDENT OF THE LINE.

BY JOHN WELLSLEY SANDERS.

The Influence of a Good Mother Cannot Stay the Hand of the Slayer.

CHAPTER XVII.

In the Little Room.

UST what happened between the two men during the first ten minutes of their stay in the little back-room in Joe Smith's place we will chronicle later. Suffice to say here, Smith, himself, served their order, after which he carefully closed the door, and went on with his customary occupation of "passing the suds over the counter," to satisfy the seemingly unquenchable thirst of the patrons of his place.

Joe Smith knew that something unusual was going on. To his method of thinking, "Brown" Taber was about to pull off a big deal. In the language of the East Side, he had a "game bird" whom he intended to "roll." Joe Smith knew "Brown's" ability in this connection, and if "Brown" had found a good one, it meant that there would be an increase in the receipts of the place—for "Brown" was, indeed, a spender when he was in funds.

Smith was in the act of mopping up his wet bar when he turned his face to the door, and was surprised to see the latticed partitions that hid it from the gaze of those in the street open very slowly and very cautiously.

He looked at the newcomer with more than surprise, for as the latticed doors opened wider and wider he saw that the person entering was a woman.

The little gray dress looked somewhat familiar, too, and then as the whole body emerged into view, there stood "Brown" Taber's mother.

She was very frightened. She seemed to stand on the threshold of the saloon as if it were going to swallow her up, as if she were

fearful that, once the doors closed on her, she would be lost forevermore.

Joe Smith laid down his rag, disregarded the several orders that were hurled at him by the men at the bar, and came around to where Mrs. Taber was standing.

There was a wicked look in his eye. He knew that Mrs. Taber had the respect of the parish notwithstanding her son's terrible record—that everybody in the neighborhood loved her. He knew that she had come for her son, but, in the event of the big deal that was to be pulled off behind the closed door, he knew also that "Brown" did not want to be disturbed.

"Is 'Brown' here?" was the little woman's first question.

Joe Smith hesitated. He wanted time to think. What could he do? How could he serve both? He hated worse than anything to lie to the little woman, and, on the other hand, if he betrayed "Brown," the chances were that "Brown" would wind it all up by punching his head.

"Is 'Brown' here?" she asked again.

"No," said Smith.

Mrs. Taber looked at him. He had never before seen such an expression on her face. He wanted to withdraw his answer and tell her the truth, but for once his tongue stuck to the roof of his mouth. It was impossible for him to utter what was in his mind.

"Joe," she said hesitatingly, "Joe," and then she faltered again. "You're not telling me the truth."

Joe tried to stammer something, but Mrs. Taber relieved him of further attempt.

"Tell me where he is. I want him."

She scanned the idling bums gathered around the bar, she looked into every corner in a vain of hope of seeing her son, but he was nowhere in sight.

She noticed the door leading to the little room where he and Blander were planning their awful crime. At first she thought that she would muster up all her courage and blaze a way to where her son might be, but something failed her.

The place was so filthy, and the great, uncanny-looking men who were standing about the bar, gaping at her as if she had come to demolish their pet resort, added to her fright.

She thought for a moment that she would go to Father Flynn and ask him to accompany her back to the saloon, but it flashed through her mind that if she did so Joe Smith would slip her son into the street, and her quest would be foiled.

She would remain there until "Brownie" was produced. She would not budge an inch until he came from his hiding-place.

"I know that he is here, Joe, and I must stay here until he appears."

"Hadn't you better stand outside?" asked Joe.

"No," she answered. "My boy is here. I know that he is in trouble, and I want to save him."

Perhaps the many times that Joe Smith's mother tried to save him from trouble flashed through his mind then; perhaps he was moved by a sudden determination to atone for the lie that he told; however, he went over to the wall, fetched a chair, and brushed it off carefully. Most politely did he proffer it to the little woman. Not knowing what was about to happen, she thanked him and sat down.

Smith went over to the room where Blander and Taber were still in conference and knocked on the door.

There was no answer, and he knocked again.

There was still no answer. He tried to open the door, only to find it locked.

Joe Smith rattled the door loudly again and again. He kicked it and pounded on it.

There was no sound from inside.

He turned to the crowd around the bar. He looked at Mrs. Taber. His face was ghastly white.

"Give me a hand here, boys," he said.

Mrs. Taber rose from her chair and walked in the direction of the door. Her wildest fears were now at a fever point. What could all this mean?

"Did 'Brownie' go in there?" she asked.

"The last time that I saw him, he went in there," said Joe Smith, "but it doesn't look much like he was in there now. However, I'll find out in a minute."

With several strong men, Smith put his

shoulder to the door. It gave a sagging, cracking sound, and then opened.

Smith was the first to enter. He turned up the dim gas-light and looked around, while the room quickly filled with the patrons of the place.

Mrs. Taber was well on the outside. She hadn't the strength to elbow her way by those powerful men.

Joe Smith and his patrons who crowded into the room saw something that made their blood freeze and their marrow congeal.

There was only one man in the room.

He was not "Brown" Taber.

He was Stephen Blander, alias Bertrand Clivers of the great Mainland System of Railroads—or all that was left of him.

He was dead. His head was resting on his arm and his body was stretched across the only table of the room.

His throat was cut from ear to ear.

There was no sign of "Brown" Taber.

The room showed no signs of a struggle. Even the two glasses partly filled with beer had not been upset, but were standing on the table just about where Joe Smith had placed them—mute sentinels of some awful crime.

One of the strangers darted out of the room, scared beyond description, shrieking the one word:

"Murder!"

His blanched face, his awful cry as he darted past Mrs. Taber and into the street, told her that something terrible had happened and that her "Brownie" was again in trouble. She sank back in the chair in a faint. Joe Smith, with unusual presence of mind and with more brute strength than he imagined he possessed, pushed the crowd from the room, and went over to Mrs. Taber.

"'Brown' went into that room, to-night, with a man. The man is in there dead, and 'Brown' has vanished!"

She spoke quickly to her. But she did not hear all that he said, for she had fallen into a dead faint.

Meantime, the first man to cry out the news and dash into the street continued to herald the terrible tidings as he ran down the block yelling "Murder!" at the highest force of his voice.

Two policemen were standing on the corner. They came toward him and he fell into their arms.

"Where?" asked one.

"Corner saloon," the man gasped.

"Take him along, and let's see, Cassidy," said one of the officers, and the well-meaning informant was dragged back to Joe Smith's

saloon to assure the officers that he had told the truth.

When the police arrived they found the place in a turmoil. It was thronged with men, and, in the midst of it all, Joe Smith was trying to administer some stimulant to Mrs. Taber, while the crowd, thinking that she was the one who had met with foul play, crowded around her until she was almost crushed.

The officers were obliged to use their nightsticks to get to Smith and Mrs. Taber. The crowd serged and pushed and fought with one another to get a point of vantage. Once or twice some one said something insulting to the officers, and they were unmerciful with their clubs.

Several other policemen heard of the affair and joined their brothers. It was too much for them, however. The crowd in the street was increasing every moment, and soon the officers found themselves wedged in so tightly that they were unable to move in either direction, or, in fact, in any direction.

Finally a citizen, with more sense than the rest of his kind, rushed to a neighboring store and telephoned for the reserves.

In a few minutes twenty men were on the spot. They formed a flying wedge, so to speak. The New York police are the best-trained men in the world when it comes to handling a mob, and soon the reserves had forced their way to the entrance of Joe Smith's saloon.

In a few minutes more they had cleared it. They drove the crowds half a block from the place, and then started to investigate.

Lieutenant Groton, in charge of the particular precinct of which Joe Smith's place was, perhaps, the center, soon rushed up in his swift automobile.

He was one of the first to question Joe about the crime.

Smith told the lieutenant the story as quickly and briefly as possible, explaining Mrs. Taber's presence. He told it straightforwardly. He had no one and nothing to shield.

Lieutenant Groton, noticing that Mrs. Taber was swooning at intervals, ordered her to be conveyed to a hospital, two officers taking her in charge while they awaited the ambulance.

The lieutenant then led the way into the room and looked at the body of the dead Blander. The officer was soon convinced that it was murder.

"Where is 'Brown' Taber?" He turned

sharply on Joe Smith as he asked the question.

"I don't know," answered Smith.

"Are you sure?" continued the lieutenant.

"On the body of my sainted mother," replied Joe Smith, adding a few statements of a similar nature to further establish his innocence.

"Well, I'll have to take you in as a witness."

The officer beckoned to two of his men to take Joe Smith in charge.

As they laid their hands on Smith, Lieutenant Groton beckoned them to bring him into the room where Blander's body lay.

"How do you suppose Taber got out of here?" asked the officer.

"Search me; I don't know," replied Smith.

"Take him away," ordered the lieutenant.

How did "Brown" Taber escape? That was the all-important question. How did the man who was, from all appearance, responsible for that hideous crime get out of that room unobserved and get away? The lieutenant wondered, the policemen wondered, and Joe Smith, while being led off to the detention pen in the Tombs, as the most important witness in the case, wondered more than all the rest.

CHAPTER XVIII.

Breaking the News.

ON the following morning the newspapers contained a startling item on their front pages to the effect that the body of "a well-dressed man had been found in a back-room of Joe Smith's saloon on the East Side, with the throat cut from ear to ear."

"Nothing," continued the newspaper narrative, "was found on the dead man that would lead to an identification," and then followed a minute description of Blander—his height, the color of his eyes, the cut of his clothing, and all the rest.

Indeed, the description was so very minute that Detective Tom Tracie, while taking his coffee in his humble Harlem flat, suddenly dropped back in his chair and almost choked.

And Jimmie Winters, sipping his coffee in his Washington Square apartments, wondered if it didn't sound very much like his old enemy, Blander.

And even Vincent Wilson, on his way down-town to the offices of the Mainland System in Louisville, was so much impressed by the telegraphic report which he read in his paper that he alighted from the car at the

nearest telegraph office and sent a wire to Tom Tracie, which read:

Have read despatch from New York in morning paper unknown man found murdered. May be our man. Advise that you see.

But Tracie didn't need any such advice. In fact, he was on his way to the Morgue to see the body before Wilson's telegram reached him.

Up to this time, the only person connected with this tragedy who had not been surprised by the item in the morning paper was the lady at the Continental Hotel on Fifth Avenue, who innocently believed that her rightful married name was Mrs. Bertrand Clivers.

It wasn't the custom for Meriel to read the newspapers with any degree of interest unless it was the gossip of the social world or a description of the latest gowns. The long and unbroken record of crime in all its phases that kept the more sordid of the metropolis in mental pabulum was, to her, as tiresome as Dead Sea fruit. If she did notice the glaring head-lines, the news had made no impression on her.

Tom Tracie took one look at the body, and then hastened down to the office of the commissioner of police. That officer hadn't arrived, but his chief assistant was present, and to him Tracie told the entire story of the Blander-Clivers mystery, winding up with the information that the much-sought-for financier was now a corpse in the Morgue, while the man who killed him had escaped.

In a short time this information was given out to the Associated Press, and was whirled over the country. Shortly before nine o'clock Vincent Wilson was preparing some reports for the division superintendents, when a messenger-boy appeared with a telegram. It was from Tracie, and it read:

Body of man you wired about is that of Blander or Clivers. No clue to his assailant.

President Jones, of the Mainland System, was not due at his office until after ten o'clock, but Wilson couldn't wait until then to tell him. Putting on his hat, he rushed down to the street, hailed a cab, and ordered the driver to rush to the home of the big man, which was situated on the outskirts of the city.

"I'm right! I'm right! I knew that I was right!" he kept repeating over and over to himself as the cab tore out to President Jones's residence.

Mr. Jones was standing in the large window of his home awaiting his motor-car which took him to his office every morning.

He was surprised when he saw the cab driving up, and from the manner in which the driver lashed his horse he knew that something out of the ordinary had happened.

But when Vincent Wilson jumped out, ran up the steps, and rang the bell, he surmised that something in the way of news regarding the peculations of the trusted employee was to be told him.

President Jones met Wilson at the door.

"He's been found!" gasped Wilson, producing the telegram.

"Who?" asked Mr. Jones.

"Clivers, or Blander, or whatever his name is," went on Wilson. "Found dead, in the back-room of an East Side saloon in New York, with his throat cut. The report is that he was murdered, but I'll bet that he committed suicide!"

The president of the Mainland System read the wire carefully once, twice, perhaps a dozen times, before he uttered a word.

Then he took the newspapers and glanced at the head-lines, and, in order to go over the whole thing as quietly and calmly as possible, he called Vincent Wilson into his study, and there the two men went over every detail of the matter so far as they knew the facts.

"It's our man, all right," said President Jones at length.

"There can be no doubt about it," Wilson spoke, with all the excitement of a boy who has found a new swimming-hole. He had done a big thing, so he felt. He had been instrumental in exposing Blander, and Blander, fearing detection and a term in jail, had killed himself. That was Vincent Wilson's construction of the death of the man.

"Now, Wilson," said President Jones, "I am going to send you to New York on this matter. I want you to take the first train for the East, and see Tracie. Look at the body, and when you are sure that the remains are those of—er—Clivers"—Mr. Jones found it difficult to get out of the habit of calling the dead man by any other name save the one he used as an officer of the Mainland—"then, as our representative, have Tracie take you to the commissioner of police and tell him all that you know about this case. Come to the office first with me, and I will give you a letter that will serve to identify you, in case you need it."

By this time Mr. Jones's motor-car was at the door. Wilson dismissed his cab and jumped in with his superior officer. During the fast trip over the thoroughfare to the offices of the company, Mr. Jones told Wilson that he really had no doubt but that the

right man had been found to protect the company's interests in the person of Vincent Wilson.

"It took courage to do what you did," said the president. "Many a man would have let it pass, or would have held it against Clivers and blackmailed him. But you showed great courage, and the company owes you something that it is not going to forget to pay."

"That's all right," said Wilson. "The satisfaction that I picked the right man is glory enough for me."

Armed with his letter of introduction, Wilson took the first train for New York, but long before he had reached the metropolis the matter was public property.

In fact, he read about it in the New York newspapers that were brought aboard the train, so fast does news travel in these advanced times. President Jones had been interviewed almost within two hours after the departure of his trusted employee. The world knew the story; it was on every tongue, and the manner in which the flame started was this:

After wiring Wilson, Tom Tracie called up Jimmie Winters, and Jimmie jumped in a taxicab and drove over to the Morgue, where Tracie was awaiting him. There he identified the body, and, as the commissioner of police had put the entire matter in the hands of Tracie, he found it part of his duty to notify the dead man's wife.

This pleasant detail even the detective disliked, but he knew that Jimmie would be just the person. With his gentle manner and diplomacy, Jimmie would break all the harrowing details to Meriel in the most approved fashion.

Jimmie didn't like the idea of going alone, so both agreed to go together.

Jimmie sent up his card. It was then about eleven in the morning, and Meriel was preparing for her morning canter in the park. She had been somewhat lonesome, and the prospect of talking to Jimmie was most alluring just then. Meantime, Tracie had had a whispered conversation with the manager, and the two men were allowed to go up to Meriel's room.

She greeted Jimmie with all the joy she possessed.

It was evident that she was in ignorance of the whole affair.

"You have brought a friend?" She saw Tracie, and she held out her hand with all the old graciousness.

"Yes," replied Jimmie. "Mr. Tracie."

Tracie bowed. The trio were seated in the parlor of the suite, and Jimmie, mustering up all his courage, broke the news.

"We have come on a painful mission, Meriel," he said as tenderly as possible. "It is about Mr.—Mr.—your husband."

Meriel didn't betray the slightest emotion.

"Did you read this morning's papers?" asked Jimmie.

"I glanced at them."

"Well," Jimmie went on, "Mr. Tracie is a member of the detective force of this city, and he has been trailing your husband for some time. Last night he was found—dead—"

"Dead!" exclaimed Meriel. She fell over in a heap. The men quickly resuscitated her.

"Tell me all about it," she said when she recovered.

They told her all—all. They told her everything they knew of the unfortunate man. They opened her eyes to the most hideous fact that can come to a woman—the fact that she was married to a thief who was masquerading under another name. They told her, too, that she would be a fool to shed one tear for him. Meriel decided quickly that she wouldn't be a fool.

Tracie left the room, and Jimmie was alone with the woman he loved more than all else in this world.

It was surprising how quickly Meriel was recovering. In fact, she was beginning to hate the man. She thought that, despite his peculiar ways, he was honest; but now the mask had been removed, the cloak torn from his shoulders, and, though he was dead, he was revealed to her in all the hideousness and loathsomeness of his real self.

"It is an awful scandal, and I want you to get away from New York until it blows over," said Jimmie. "Take a little trip somewhere for a month or two, and then go back to your old home, where we knew you before that viper came into your life. Just now the town is talking of nothing but this man. There are some who believe that he committed suicide—and, if that is not true, then he was planning some awful crime with the man who entered that saloon with him."

Meriel took the suggestion, and departed quietly before her connection with the affair was aired in the papers. It was aired, too, in every possible manner and from every standpoint. Her photographs were published far and wide, scores of reporters were on her trail, and dozens of newspaper pho-

tographers stood in front of her hotel for days, waiting for her to appear.

But Meriel had slipped away, far away to a quiet retreat in the mountains.

And nobody knew where but Jimmie.

CHAPTER XIX.

Curtain.

HOW had the death of Blander been encompassed?

It happened on that fatal night, shortly after Blander and Taber had entered the little room. Blander asked Taber if he were ready to undertake the job.

"I am," replied "Brown," "if you care to come to my terms."

"I have decided on that," was Blander's answer. "Furthermore, I have brought the cash with me."

He took a long, black wallet from his inside pocket, and counted out just two hundred twenty-dollar bills.

"I thought that you would not care to have it too large—that is, the bills of too large a denomination," said Blander as he leisurely counted out the bills, laying one on top of the other while the hungry eyes of "Brown" Taber feasted on them.

Blander stacked them up nicely, ran over them a second time, asking "Brown" to watch closely so as to detect any errors.

When both men were assured that the amount of the first payment of the contract—four thousand dollars—was correct, Blander took from his vest-pocket a rubber band, incased the bills in it, and handed them to "Brown," asking:

"When can you do this?"

"Now," replied Taber—"right now."

Taber rose to his feet. There was something unusual in his voice that startled Blander.

In a moment "Brown" Taber had whipped out a knife.

In another moment he had sprung at Blander. In another, Blander was forced against the wall by the powerful thug, and as he raised his hands to heaven—either in fright or mute appeal, "Brown" brought the knife across his throat.

Blander went down in a heap, striking the table. Taber put out his mighty arm to break the fall, for he didn't want any sound to be heard outside. Blander landed on the table just as the police found him. Death had come to him quickly. There is no doubt that in such moments the shock and surprise

caused by fright adds greatly to relieve the suffering.

The one and only thing that Taber wanted—the four thousand dollars in small, easily passed bills—was now his. He had never taken the commission of the crime proposed by the dead man seriously; but "if this old guy," as he said to himself, "is coming around with four thousand in good American cash, I'm not going to pass him by."

"I'll get it if I have to kill him," said "Brown" to himself that night, just before he and Blander had entered the saloon.

Realizing that the man was dead, Taber at once began his plan of escape. It was shrewd and well thought out. He had the money, and he was going to some country afar, where his face was unknown. He was tired of the humdrum of the East Side, where he was pointed out as the most prominent crook within its borders to every slumming party that happened along. Now he would vacate for good.

Once he thought of his mother. Mother! Mother! Dear, good, kind little mother, who had never deserted him! What would she do? She had begged him not to—he drew a hand across his eyes, for he wanted to blur her from his mind just then. Perhaps when he was settled in the new land she would come to him—if—the shock didn't kill her.

But this was no time for sentiment. Mother or no mother, he must get out of that room.

The criminal is a criminal always. What is bred in the bone cannot be eliminated from the mind. Lombroso, that great Italian who devoted his whole life to a scientific study of such men as "Brown" Taber, tried to tell just why a thief is always a thief. The fact is, he can't help it.

It is born in him. He must steal, on the same principle that he must eat. He must kill, on the same principle that he must breathe. The holiest sentiments of mother, of wife, of family, will not stay his hand a moment, once the idea seizes him.

Brown Taber looked around the room. He looked on the dead man, lying there very still. He put the money in his pocket, and then he went through the clothing of the dead and removed every vestige of paper that would possibly serve as a clue to identification.

He even tore the initials from the dead man's hat, and pulled a signet-ring from his finger. Taber didn't want to leave the slightest trace.

Then he turned the light very low. Ta-

king the tray on which Joe Smith had served the drinks, he stepped over to the door and opened it very cautiously about two inches. He looked steadily at Smith and at the men around the bar. There were about a dozen present, but finally all departed but four men, who with Joe Smith made five.

One of them began a story, and the others leaned over the bar. As it progressed in interest their heads bent lower, and they were oblivious to all else. At what seemed to be the psychological moment, Taber opened the door a little wider and sent the tin tray crashing against the wall.

It landed with a loud clang and rolled to the floor. Just as "Brown" expected, Smith and the five men hastened over to see what had happened.

As they did so, he slipped out and into the street.

It all happened in the flash of a moment—oh, he knew so well just how the men would act, and how much time he would have to make the street!

One turn of his head, and it might all be over. He stepped onto the sidewalk just as if nothing had happened. He walked along toward the Bowery as if he were on some ordinary errand. No one would have thought that he was an escaping murderer with four thousand dollars in his pocket.

"Only one of my trays," said Smith. "It must have fallen off the table. Come back to the bar."

"Gee, but it made some noise," said one of the men—and that was all that was said about the incident then.

Shortly after Smith had proved his innocence and promised to testify if ever "Brown" Taber was caught—when he was free to go back to his "joint" again—he frequently wondered if that tray had really fallen from the table.

"If 'Brown' used that business in his get-away," he frequently said, "then he is a better crook than I expected. It was a pretty slick piece of work. And there were we guys rubberin' at the tray, and 'Brown' sneakin' out of the door. I wonder how much he took off the fellow, anyhow?"

When "Brown" Taber reached the Bowery, he started north. He arrived at the Grand Central Station in time to catch a train for Chicago. Once in that city, he "planted" himself with a bunch of thieves whom he knew.

They were all glad to see him, and glad to know that he had pulled off a successful "trick." But after they began to read the

papers, and to realize that "Brown" must have "landed" pretty well, they all wanted a "bit."

He began to see that if he made a "divvy," he would be minus the greater part of his roll, and then there was the trouble of some "dishonest" crook squealing to the police and ending his freedom.

Above all, there was that place in the unknown land, where he could pose as a decent man and—send for mother.

So he started out anew. This time he struck out for the Northwest. Notwithstanding the fact that the police of every State were on the lookout for him, and his picture had been brought to light in every rogues' gallery, he managed to evade the sleuths.

With great skill he crossed the frontier, journeyed into Canada, and at Vancouver took the steamer for Australia, traveling in the steerage as a miner bound for the gold-diggings in the western part of that faraway country.

It was a pleasant, invigorating voyage, and it gave him time to think. The chief object of his thoughts was his mother. He wondered and wondered how she was getting along, and he hoped and he prayed that Father Flynn would comfort her, and that her neighbors would not be unkind to her.

But what if the police should molest her, thinking that she knew where he was? And what if the landlord should have her ejected because of the notoriety?

He buried his face in his hands. No, he would not think such thoughts. The journey would soon be over, and he could send for mother. Then she would come to him quietly and alone, and he would give her a home of which she would be proud.

The long sea trip was over, and one day "Brown" found himself in the beautiful harbor of Sydney. He went ashore, and he soon knew that he would like the colonial city. It was a very sprightly place, and the people all seemed happy, and it looked very much like the American cities to which he had been accustomed.

Here he would settle. He found work, and he gloried in the joy of honest labor for the first time in his life. He remained sober and banked his stolen money. He didn't want to invest it until mother came, for he wanted her to help him put it where it would do the most good.

After three months of the first honest life that he had ever known, he sat down and wrote to her. The note was couched in plain and simple language. He didn't want

to tell her too much. It simply said "Come to me," and it was unsigned, but mother would understand.

He waited and waited for an answer. He waited and waited, and every time that the steamer arrived from faraway America, he would go to the wharf and scan the faces, hoping to see the dear, sweet smile of mother as she leaned over the taffrail.

But mother never came. And mother never read the short missive bidding her to cross the ocean. She never recovered from the awful shock of the murder. Two weeks after, she died in a delirium, calling to her "Brownie" to be a good boy just as she called to him when he was a little lad running around the streets—a little mischievous, perhaps, but her pride and joy, her flesh and blood.

The good priest never deserted her in her last hours on earth. He said a mass over her body, and the little church was crowded with the people who loved her because she was a good mother.

One day the postman came to Father Flynn with a strange envelope addressed to Mrs.

(The End.)

Taber, for the priest was her executor. The postman wanted to know if Father Flynn, as such, would take the letter.

He took it, and looked at it with a puzzled face. He seemed to recognize the writing. "Brown" had tried to disguise it, but the familiar lines were there.

"Yes, I will take care of it," said Father Flynn. "So he is in Australia," he continued, as the postman went his way.

Taking a pencil from his pocket, he wrote across the envelope, "Not here. Return to writer," and deposited it in the nearest box.

It went back to Australia—where it may be resting in the dead-letter office to this day.

Some years after, Jimmie married the beautiful Meriel, and gave her a name of which she could be proud.

And, some years later, too, Vincent Wilson became president of the line—the great Mainland System.

And "Brown" Taber was lost in the crowds that migrated to the new gold-mines of Western Australia, where he was swallowed up in the hunt for the yellow metal.

THE OLD FREIGHT-CAR.

BY J. E. HARE.

I'M an old and battered freight-car,
Resting in the railroad yard;
My existence is a hustle
That is mighty, mighty hard.
I have journeyed out to Frisco,
I have braved the Northland's cold,
I have hauled the rich ore laden
With Nevada's yellow gold.

I have borne the grain of Kansas,
And fruit of southern lands;
I have crossed the blazing deserts,
And the Arizona sands;
I have journeyed into countries
That were wild alike and strange;
I have climbed the lofty Rockies;
I've been stalled on snowy range.

I have jogged far down to Mexico,
The cactus land so gay;
I have jolted to Seattle,
With headlands dark and gray;

I have gone way up to Michigan
For loads of lumber clear;
I've gone empty to Milwaukee,
And come back full of beer.

From Maine to California,
From the mountains to the sea,
From Montreal to Texas,
Has been a stroll for me.
In winter and in summer,
I have been upon the go;
At times my trips were rushed a bit,
At others, very slow.

Good-by, I must be leaving,
I'll be on my way, old pard;
I hear the switching-engine
Coming puffing down the yard.
Soon they'll couple me to others,
Some as old, but not so spry.
Bump! Toot! Toot! I'm going,
I'm off again, good-by.

ON THE EDITORIAL CARPET.

The Straight Air Is On, and the Automatic Air Is Ready—and Perhaps There's a Little Hot Air, Too.

AS usual, we are on the job bright and early. We are hard at work planting another stop-look-and-listen post, for we intend to have a clear track for our November speed-burner, and if anybody doesn't happen to know that we are headed his way with as fine a train as ever came out of the shops, we want to put him wise right 'now.

We've got a right-of-way over everything on the whole system, from the fast freight to the limited, and there is no chance of our getting short-circuited or put out of business by a burn-out, as we don't have to depend on trolley wires or third rails to feed us with juice.

We have every ounce of our power aboard. Our tender is filled with live, snappy articles, short stories, and serials, every one a gage-booster, and guaranteed to keep the white feather trailing at the steam dome as long as there is a single page left.

But don't look for smoke—we are not wasting any of our energy in that direction—for everything that goes into our fire-box has got to be up to standard, and we've got a tallow-pot who won't handle anything but the best grade of anthracite reading matter.

Among the fiction, "Until Relieved," by George H. Fellows, is a story that will make a hit with the ops and towermen who have experienced the wear and tear of long hours of overtime. It worries a fellow-some to keep his eyes open steadily for over two days. After such a strain, a man is lucky who can still smile and look the world in the face with an easy conscience.

"An Hour In the Pit," by Robert Fulkerson Hoffman, is a live tale that gives us some side lights on the reason why a certain individual gave up his job in the drop-pit and took to wiping. It is full of snap and ginger, and is varnished with the lore of the roundhouse.

There will be two good ghost stories in the November number—one concerning the doings of an artificial specter concocted in the laboratory of Honk and Horace, which caused as many shivers as any inhabitant of spirit land could hope to inspire, while the other is a tale in which there is a spook engine that keeps the reader guessing.

"Hoop's Hobbies," by B. A. Kobelt, is one long series of laughs.

Augustus Wittfeld has given us another one of his Dugan epics, well up to the standard of the other tales which, though published some time ago, our readers are hardly apt to have forgotten.

Right here we must say a word for the new serial by George Allan England, "The Steeled Con-

science," the first instalment of which appears in this number. When it comes to power, intensity, and human interest, this story has everything of its kind on the whole line side-tracked, and waiting at the switches for it to go by. It is just alive with exciting situations, and has a jolt in every chapter that has got the kick of a mogul stopped fifty different ways.

We will begin a new serial in the November number. It is by a writer who will make his first appearance in THE RAILROAD MAN'S MAGAZINE. He is Dan Duane, and the name of his story is "In the Hornet's Nest." Mr. Duane writes the sort of stuff that will make your crown-sheet buckle and your boiler foam. As they say in the lingo of the ring, his story has the wallop.

Charles Frederick Carter's "How the Railroads Came to New England," is one of those articles which carry the old-timers back to the days when they were the whole dome-cap.

Arno Dosch has been abroad in the land unearthing new stories of daring and heroism. We will have a cluster of them for good Thanksgiving measure. Only railroad men can figure in such stories as these. They made our eyes stick out like the markers on a dog-house when the night is clear.

Those who are watching latest developments in locomotive practise will find the article by R. H. Rogers, showing the superiority of the Walschert valve-gear over the time-honored Stephenson link motion, of particular interest. It will be published in the November number. Mr. Rogers gives a close account of the operation of both systems of valves, and leaves little doubt as to which has the greater efficiency.

Clear track for November!

THE COAL THAT LOCOMOTIVES EAT.

ACCORDING to a report recently made to the geological survey, one-fifth of the coal mined in the United States in 1906 was burned in railroad locomotives, at a cost of close to \$170,500,000. Compared with the immense amount of coal that is consumed annually for light, heat, and power in the great cities and factory districts of this country, this figure seems remarkably large, but, says the *Erie Employees' Magazine*, its principal significance lies in the argument which its analysis makes for the conservation of natural resources.

Professor W. F. M. Goss, dean of the University of Illinois, who conducted the experiments, reports

that of the 90,000,000 tons of coal the railroads used in 1906, 10,080,000 tons are lost through the heat and gases discharged from the stacks of the locomotives, 8,640,000 tons through cinders and sparks, 5,040,000 tons through radiation, leakage of steam and water, 2,880,000 tons through unconsumed fuel in the ashes, and 720,000 tons through the incomplete combustion of the gases.

Moreover, 18,000,000 tons are consumed in starting fires, in moving the locomotives to their trains, in backing trains into or out of sidings, and in keeping locomotives hot while standing.



AN OLD-TIME EPIC.

IN response to a volume of requests that we add it to our collection of famous old-time railroad poems, we are pleased to present in this month's Carpet, Will Carleton's epic of the rails known as "The Death-Bridge of the Tay." Mr. Carleton is a poet of whom America is justly proud. He wrote "Over the Hills to the Poor House," and "Betsy and I Are Out," which will live as long as the language—and so will

THE DEATH-BRIDGE OF THE TAY.

BY WILL CARLETON.

THE night and the storm fell together upon the old town of Dundee;

And, trembling, the mighty Firth river held out its cold hand toward the sea.

Like the dull-booming bolts of a cannon, the wind swept the streets and the shores;

It wrenched at the roofs and the chimneys, it crashed 'gainst the windows and doors.

Like a mob that is drunken and frenzied, it surged through the streets up and down,

And screamed the sharp, shrill cry of "Murder!" o'er river, and hill-top, and town;

It leaned its great breast 'gainst the belfries; it perched upon minaret and dome;

Then sprang on the shivering Firth river, and tortured its waves into foam.

Look! the moon has come out, clad in splendor, the turbulent scene to behold!

She smiles at the night's devastation—she dresses the storm-king in gold.

Away to the north, ragged mountains climb high through the shuddering air;

They bend their dark brows o'er the valley, to read what new ruin is there.

Along the shore-line creeps the city, in crouching and sinuous shape,

With fire-sides so soon to be darkened, and doors to be shaded with crape!

To the south, like a spider-web weaving, there curves, for a two-mile away,

This world's latest man-devised wonder—the far-famous bridge of the Tay.

It stretches and gleams into distance; it creeps the broad stream o'er and o'er,

Till it rests its strong, delicate fingers in the palm of the opposite shore.

But look! through the mists of the southward, there flash to the eye, clear and plain—

Like a meteor that's bound to destruction—the lights of a swift-coming train.

'Mid the lights that so gaily are gleaming yon city of Dundee within,

Is one that is waiting a wanderer, who long o'er the ocean has been.

His age-burdened parents are watching from the window that looks on the Firth,

For the train that will come with their darling—their truest-loved treasure on earth.

"He'll be comin' the night," says the father, "for sure the handwritin's his ain;

The letter says, 'Ha' the lamp lighted—I'll come on the seven o'clock train.

For years in the mines I've been toiling, in this wonderfu' West o'er the sea;

My work has brought back kingly wages—there's plenty for you an' for me.

So sit ye an' wait for my coming (ye will na' watch for me in vain),

An' see me glide over the river, along o' the roar o' the train."

So they sit at the southernmost window, the parents with hand clasped in hand,

And gaze o'er the tempest-vexed waters, across to the storm-shaken land.

They see the bold acrobat-monster creep out on the treacherous line;

Its cinder-breath glitters like star-dust—its lamp-eyes they glimmer and shine.

It braces itself 'gainst the tempest; it fights for each inch with the foe;

With torrents of air all around it—with torrents of water below.

But look! look! the monster is stumbling, while trembles the fragile bridge-wall;

They struggle like athletes entwining—then both like a thunder-bolt fall!

Down, down, through the dark the train plunges, with speed unaccustomed and dire;

It glows with its last dying beauty—it gleams like a hailstorm of fire!

No wonder the mother faints dead-like, and clings like a clod to the floor;

No wonder the man flies in frenzy, and dashes his way through the door!

He fights his way out through the tempest; he is beaten, and baffled, and tossed;

He cries, "*The train's gang off the Tay Brig! Lend help here to look for the lost!*"

Oh, little to him do they listen, the crowds to the river that flee;

The news, like the shock of an earthquake, has thrilled through the town of Dundee.

Out, out creep two brave, sturdy fellows, o'er danger-strewn buttress and piers;

They can climb 'gainst that blast, for they carry the blood of old Scotch mountaineers;

But they leave it along as they clamber, they mark all their hand-path with red;

Till they come where the torrent leaps bridgeless—a grave dancing over its dead.

A moment they gaze down in horror; then creep
from the death-laden tide,
With the news, "There's nae help for our loved
ones, save God's mercy for them who have
died!"

The morning broke bright with the sunshine, and
the Firth threw its gold glances back,
While yet on the heart of the people death's cloud
rested heavy and black.
And the couple who waited last evening, their man-
statured son to accost,
Now laid their heads down on the table, and
mourned for the boy that was lost.
"Twas sae sad," moaned the crushed, aged mother,
each word dripping o'er with a tear,
"Sae far he should come for to find us, and then
he should perish sae near!"

"Oh, Robin, my bairn! ye did wander far from us
for mony a day,
And when ye ha' come back sae near us, why could
na' ye come a' the way?"
"I hae come all the way!" said a strong voice, and
a bearded and sun-beaten face
Smiled on them the first joyous pressure of one
long and filial embrace.

"I cam' on last night far as Newport; but Maggie,
my bride that's to be,
She ran through the storm to the station, to get
the first greetin' o' me.
I leaped from the carriage to kiss her; she held me
sae fast and sae ticht,
The train it ran off and did leave me; I could na'
get over the nicht.

"I tried for to walk the brig over—my head it was
a' in a whirl—
I could na'—ye know the sad reason—I had to go
back to my girl!
I hope ye'll tak' kindly to Maggie—she's promised
to soon be my wife,
She's a darling wee bit of a lassie—and her fond-
ness it saved me my life!"

SONGS WANTED.

CAN any of our readers supply us with the
words of the old poem, entitled "I Want
To Be a Brakeman." It was written, we believe,
about twenty years ago, and many of you old-timers
brother boomers who had gathered at Pocatello,
Idaho, one winter's night. The first line ran:

No conductor for me, just a brakeman, by hen!
I can make a couplin' on a dead run.

We also have a request to publish a poem writ-
ten about the Oregon Short Line. It was the
story, we believe, of a stove-pipe session of some
brother boomers who had gathered at Pocatello,
Idaho, one winter's night. The first line ran:

It was on the O. S. L.

Who knows it?

Still another reader writes as follows: "I would
like to have you publish a poem written about a

railroad wreck that occurred near Chattanooga on
the Southern Railroad, just as a train was leaving
the tunnel near Missionary Ridge at Sherman
Heights. All that I remember of it is:

'Twas only a poor dying brakeman,
Nobody knew his name.

Dig into your memories, boys, and see who can
send in the complete poem first.

And still they come! One of our New Jersey
lads sends in a polite epistle. Says he: "Will
you please publish 'When McCracken Went a
Braking'? It starts off so:

When McCracken went a braking,
It was ten to one that he
A brakeman solid gold and
Fourteen carat fine would be.

RAILROAD FACTS AND FIGURES.

WE have received a copy of "The Railway
Library," an interesting volume on rail-
road statistics containing many valuable reports on
the progress and operation of the great systems of
this country during the past year. The work was
compiled by Slason Thompson, manager of the
Bureau of Railway News and Statistics, in Chi-
cago.

Besides containing numerous figures and data
on every phase of railroading imaginable, the book
presents addresses and reports of some of the fore-
most railroad executives of America, in which their
best views on transportation problems are set forth.

Railroad men who enjoy keeping up to date on
these matters will find "The Railroad Library" a
valuable book. It not only contains a large fund
of information, but the subject-matter is so well
arranged that it is also valuable as a reference
book.

RAILWAY SCHOLARSHIPS.

GEORGE F. WOLFE, of Youngwood, Pennsyl-
vania, and M. Roy Strong, of Cleveland,
Ohio, were recently announced as the successful
candidates for the Frank Thomson Scholarships.
With the addition of these two young men, there
will be eight holders of these scholarships, which
amount to six hundred dollars annually, and which
are awarded upon a competitive examination to sons
of employees of the Pennsylvania Railroad System.

The successful candidates for the scholarships in
1907 were W. B. Rudd, of Media, Pennsylvania,
who graduated in June of this year from Yale Uni-
versity, and George J. Richers, of Altoona, Penn-
sylvania, who is taking a course in engineering at
the University of Pennsylvania. In 1908, Merritt
E. Gill, of Grand Rapids, Michigan, now at the
University of Michigan, and Harry Wallis Ander-
son, of Folcroft, Delaware County, Pennsylvania,
now at the University of Pennsylvania, were award-

ed the scholarships. Benjamin M. Snyder, Jr., of Elmira, New York, and Wallace B. Porter, of Youngstown, Ohio, won the scholarships in 1909.

Young Wolfe is a son of George B. Wolfe, a locomotive engineer on the Southwest Branch of the Pittsburgh Division of the Pennsylvania Railroad. He is seventeen years old, and has just graduated from the high school in Greensburg, Pennsylvania. He expects to enter the civil engineering department of Lehigh University.

M. Roy Strong is a son of Arthur W. Strong, telegraph operator, on the Cleveland and Pittsburgh Division of the Pennsylvania Lines. He has been attending the Case School of Applied Science, Cleveland, Ohio. He is twenty-one years of age, and expects to continue at the Case School. Strong is at present a member of the engineer corps on the Cleveland and Pittsburgh Division.

The Thomson Scholarships were established by Anne Thomson, Frank Graham Thomson, and Clark Thomson, children of the late President Frank Thomson, of the Pennsylvania Railroad Company. The grantors of this trust fund of one hundred and twenty thousand dollars declared it was their desire to afford to the sons of living and deceased employees of the Pennsylvania System an opportunity for a technical education. With the awards for 1910 there are eight beneficiaries of the Thomson Scholarship Fund receiving a college education. This number will be maintained by awarding two scholarships every year.

The Atchison, Topeka, and Santa Fe Railway has promulgated an order to establish a scholarship in the Armour Institute at Chicago to be awarded to the apprentice of the system having the best record. Another will be awarded next year. Afterward, should the arrangement work out satisfactorily, one scholarship will be awarded each year. The only conditions attaching to the competition are that the apprentice selected shall have served three and a half years with the road, and be able to pass the entrance examination of the Institute.

DESPATCHING BY PHONE.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your July number you published an article on train-despatching by telephone. I believe some of the statements therein are erroneous. The article states that the telephone minimizes the danger of mistakes in the transmission and receipt of train orders. In the Morse code of telegraph, each and every letter is distinctly different. When spoken through a telephone the letters "b," "c," "d," "e," "g," "p," "t," "v," and "z" sound very similar, and, in many cases, it is very difficult to distinguish between them. On this I base my claim that the telegraph is safer than the telephone.

Now in regard to speed. The article says that a despatcher using the telegraph has his speed restricted to accord with the receiving ability of the operators. I cannot see that he is rid of this restriction where the telephone is in use. A first-class operator can copy a telegraphic order just as fast as he can write. Can he do more with the

telephone? I know of one despatcher now using the telephone who claims he can handle three telegraphic orders in the same time he uses for one with the telephone.

The article claims that on one road, during two years of train-despatching by telephone, not a single accident was caused by mistakes in train orders. I fail to see anything remarkable about that. On the road which employs me, I cannot recall an accident caused by a mistake in the transmission or receipt of telegraphic train orders, in the past seven years.

If the telephone is to take the place of the telegraph, it will not be for the sake of safety, but to reduce expenses.—V. H. W., Erie, Pennsylvania.

We are glad to publish Mr. V. H. W.'s letter, for we welcome a free and frank discussion from all our readers on anything we may publish. However, the article to which our contributor refers was not an original article for these pages, but, as we plainly indicated, it was reprinted from no less reliable authority, the *Railway and Engineering Review*. We wanted to place before our readers the views of that publication on train-despatching by telephone.

As to our personal view, we do not believe that the telegraph operators need fear that they are destined to extinction by the introduction of this new method, any more than the engineer need fear that the electric-motor will deprive him of his work. Some roads will adopt the new scheme of telephoning, but there will always be a place for the "opr." In the great compound of railway operation, his position is just as secure now as ever.

BRET HARTE'S RAILWAY POEM.

ONE of our readers sends in the following old-time railroad poem. It is by a man whose name stands at the head of American letters, and it is a fitting addition to our collection:

BILL MASON'S BRIDE.

BY BRET HARTE.

HALF an hour till train-time, sir,
An' a fearful dark time, too;
Take a look at the switch lights, Tom,
Fetch in a stick when you're through.
On time? Well, yes, I guess so—
Left the last station all right;
She'll come round the curve a flyin';
Bill Mason comes up to-night.

You know Bill? No? He's engineer,
Been on the road all his life—
I'll never forget the mornin'
He married his chuck of a wife.
'Twas the summer the mill hands struck—
Just off work, every one;
They kicked up a row in the village,
And killed old Donovan's son.

Bill hadn't been married more'n an hour,
Up comes a message from Kress,
Orderin' Bill to go up there
And bring down the night express.

He left his gal in a hurry,
And went up on number one,
Thinking of nothing but Mary
And the train he had to run.

And Mary sat down by the window
To wait for the night express;
And, sir, if she hadn't 'a' done so,
She'd been a widow, I guess.
For it must 'a' been nigh midnight
When the mill hands left the Ridge;
They came down—the drunken devils
Tore up a rail from the bridge;
But Mary heard 'em a workin',
And guessed there was something wrong—
And in less than fifteen minutes
Bill's train it would be along!

She wouldn't come here to tell us,
A mile—it wouldn't 'a' done;
So she jest grabbed up a lantern,
And made for the bridge alone.
Then, down came the night express, sir,
And Bill was makin' her climb!
But Mary held the lantern,
A swingin' it all the time.

Well, by Jove! Bill saw the signal,
And he stoped the night express,
And he found his Mary cryin'
On the track in her weddin'-dress;
Cryin' an' laughin' for joy, sir,
An' holdin' on to the light—
Hallo! here's the train—good-by, sir,
Bill Mason's on time to-night.

WE DON'T BLAME HIM.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

BY way of a bouquet, kindly accept the following: Noting the article by "A St. Joseph Booster" in the August number that he would continue to read THE RAILROAD MAN'S MAGAZINE, if he had to steal it, reminds me that I really did steal this August number from a caboose where I chanced to be visiting. You may chalk me up with a few "brownies," as it was worth the money.

I must say further, that you gentlemen are about the jolliest that could possibly get together in one bunch in an editorial office, not that I know anything about your line of business, but you certainly hand out the dope in a way that makes a hit with me.

I am working at a lonesome telegraph job near Denver, and I am always looking forward to the next number of THE RAILROAD MAN'S MAGAZINE. It's about the best thing I have struck yet to help pass away my twelve hours per, only it doesn't last long enough when it only comes once a month. But keep the good work going. You are doing fine.—F. B. R., Denver, Colorado.

LONGEST STRETCH OF "STRAIGHT."

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN the August RAILROAD MAN'S MAGAZINE, mention is made of a seventy-mile stretch of straight track on the Rock Island lines, in Texas. In this connection, I will cite a longer

section of track without a single curve. It is on the Mexican Central division of the National Railways of Mexico, on their line from Monterey, Nuevo Leon, to Torreón, Coahuila, between the stations of Letona and Santa Lucia. This piece of straight track is something like one hundred and sixty kilometers long, or about one hundred miles.

E. J. LOPEZ,
Sabinas, Coahuila, Mexico.

FROM "HASH HOUSE WILLIE."

EDITOR, THE RAILROAD MAN'S MAGAZINE:

BEING a steady reader of your magazine, I surely had a surprise the other day when I came to "The Railroad Eating Shack," by Miss Bessie Bardsley, in your August number. I am "Hash House Willie." Last winter, in Caliente, Nevada, on the Salt Lake route, mid the sage-brush, one of the Wells-Fargo men christened me that way. The railroad is my home. If I can't do anything else on the railroad, I take jobs in the eating shacks. At present I am with a commissary outfit of the O. S. L.

We all envied Miss Bardsley for one thing: she left us before the famous disaster of last New Year's Day. If you know her present address, kindly tell her that "Hash House Willie" will play her any tune she prefers "where the porter beats the gong," and that "No. 2 is dining behind the engine."

Your magazine has a department, "Told in the Smoker." It will soon have "Told in the Eating Shack."

Our present station is a siding called Orchard, Idaho. The Oregon express No. 5 happened to meet the east-bound fast mail here the other day, and that enabled me to secure the August number from the "news butch."

If you have your magazine for the year 1909 on hand, kindly notify me in your next number.

HASH HOUSE WILLIE,
Ogden, Utah.

We are glad to hear from you, Hash House, and it pleases us to state that any and all back numbers of THE RAILROAD MAN'S MAGAZINE, from the first, October, 1906, can be secured by sending 10 cents per copy to this office.

LOCOMOTIVE PERCENTAGES.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your August number, page 420, in reply to E. R., Parsons, Kansas, you say you "never heard of locomotive percentages." There are some roads that have a kind of percentage rating that E. R. may have in mind.

Their tonnage is based on the maximum load their largest engine can handle over the maximum grade. This engine is called a 100-per-cent engine, and the various lighter types would range downward, something like 97 per cent, 93 per cent, or what they might figure to the smallest, which might be a 52-per-cent engine.

If they subsequently bought a larger type it would be known as a 110-per-cent engine, or whatever it figured, until such time as they saw fit to

rearrange the percentages in terms of their newest and heaviest type.

These percentages are of use during inclement weather to figure various types of power from one base.—C. S. C., Dillonvale, Ohio.

THANKS, BROTHER BILLIN!

EDITOR, THE RAILROAD MAN'S MAGAZINE:

I WISH to say a few words in praise of THE RAILROAD MAN'S MAGAZINE. I think it just fills the bill from our point of view, and I don't see how it can be improved. I always look forward to the coming of my magazine with the greatest of pleasure, and I read every story from cover to cover. I think "The Observations of a Country Station-Agent" and "Ten Thousand Miles by Rail" are fine. I enclose a money order for two dollars for two years more.

J. V. BILLIN,
Church Point, Louisiana.

HAVE YOU SEEN "12345" ?

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your August number, H. B. Meyers, Macon, Georgia, states he saw Illinois Central 12345, at Savannah, Georgia, May 23, 1910. On July 30, Illinois Central 12345 was delivered to us as a merchandise car from Chicago division, being billed from Chicago to West Lebanon, Indiana, containing merchandise. We handled this car on that date from Rantoul, Illinois, to West Lebanon, Indiana, and was returned the same day on our train, No. 892, from West Lebanon, Indiana, to Rantoul, Illinois. The car was set out in the Rantoul yards, and again went forward on No. 891, of August 2, to Dillsburg, Illinois, where it was loaded with corn for Memphis, Tennessee, and was sent out on No. 892 of August 2, and set out at Rantoul, Illinois, with final destination as Memphis, Tennessee. Would be pleased to hear further from Illinois Central 12345.

G. G. DOUGLAS,
Brakeman I. C. R. R., Rantoul, Illinois.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your August number of THE RAILROAD MAN'S MAGAZINE, I noticed a letter from one of your readers in Georgia, stating that he had seen Illinois Central car 12345, after having read an article published by you some time ago about an operator who was on the lookout for such a car number. I also read that article, and have been watching for a 12345 car myself, and on July 13 last I saw Erie 12345 passing through Newark, New Jersey. To-day [July 28] I saw Chicago Great Western car 23456 also passing through Newark. This also being a "straight," I thought you might be interested.

You are certainly putting out a great magazine, and I look forward to its coming every month with the greatest interest. Although not a subscriber, I have never missed a single number since the first issue.

A. L. CRANE,
Springfield, New Jersey.

Charles H. Bevier, tie inspector, C. and G. W. Railway, writes from Carleton, Michigan, that he loaded the I. C. car No. 12345 on July 10, at Brook-

port, Illinois, with ties for the C. and G. W. Railway, billed to Carbondale, Illinois.

J. S. Pearson, Paradise, Montana, also writes: "I have just spotted a car No. 12345 here. It was loaded with lumber for Ravenna, Nebraska. I had been looking for one for some years, and this is the first I saw."

NO FLAG FOR US.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

I HAVE been a constant reader of THE RAILROAD MAN'S MAGAZINE from the time it was first issued. I have enjoyed every article written it has published. It has been a source of information to me, and it is helpful to any man working on a railroad.

That you may know the interest I take in your magazine, I have kept *every copy* since Vol. I, No. 1. I am keeping them to look over again, and if anything should happen that you should have to discontinue publishing, I can start and read them over again until you get another that can equal it, which I think very doubtful.—C. F. A., Somerville, Massachusetts.

STILL ANOTHER OLD ONE.

MR. J. W. WOOD, of the Katy, who kindly contributed "How It Works," from his scrap-book for our September number, sends us another for this month. Our kindest regards to Mr. Wood. All join in:

CREDULITY.

"SUPPOSE," said the fireman, rubbing the grime
From off his dark complexion,
"Suppose you were trying to make up time,
And not a tank on the section!
And, suppose that the water was down to three,
And steam was standing pat,
With the gage somewhere up in high 'G'—
What's done in a case like that?"

"Done!" smiled the lofty engineer,
"I'd just haul open the throttle!
I've run a train on a bottle of beer,
And then thrown in the bottle!
There's engineers on passenger-trains
That's made up time on a flask;
It's only a matter of pluck and brains—
But, tell me, why did you ask?"

"Because," said the fireman, rubbing his nose
And giving the shovel a yank,
"I think, by the way she snorts and blows,
There's not a drop in the tank.
And now, old man, I would like to see
A beer-bottle start her pump;
Here's one that the section boss gave me—
Now, work it, or else you jump!"

One bound, and the lofty engineer
Went out of that engine van,
And when he struck it didn't appear
Which was the chief end of man.
"I hope," the grimy fireman said,
As he opened the throttle wide,
"I hope he isn't really dead—
But I'm engineer, if he died!"

Heating for delicate women

The width of a window-sill separates fierce Winter from gentle Summer—that is, if your heating outfit has been rightly chosen. The most delicate women and the frailest flowers thrive and bloom in the wholesome warmth and ventilation brought about by

AMERICAN & IDEAL RADIATORS & BOILERS

The cleanly, genial warmth these outfits produce enables your wife to dress in light-weight, becoming clothing, to appear at her graceful best, to work and exercise unrestrictedly; and relieve her of all back-breaking drudgery that is a part of old-fashioned heating methods.

IDEAL Boilers and AMERICAN Radiators are sure aids to domestic happiness and economy. They keep the house cozy and healthful in all kinds of bad weather. By saving much coal and doing away with repair bills, as well as giving long life to furnishings and decorations, they more than earn their cost. In fact, they are in every way an investment—not an expense.



A No. 2118 IDEAL Boiler and 270 ft. of 38-inch AMERICAN Radiators, costing the owner \$135, were used to Hot-Water heat this cottage.

A No. A-241 IDEAL Boiler and 461 ft. of 38-inch AMERICAN Radiators costing the owner \$215, were used to Hot-Water heat this cottage.

At these prices the goods can be bought of any reputable, competent fitter. This did not include cost of labor, pipe, valves, freight, etc., which installation is extra and varies according to climatic and other conditions.

Showrooms in all
large cities

AMERICAN RADIATOR COMPANY

Write to Dept. J
CHICAGO



ADVANTAGE 21. All IDEAL Steam Boilers are fitted with Syphon Regulator, which is the greatest improvement made in a century, for giving perfect control over the draft and check dampers. This regulator keeps the steam steadily at the right point for economical heating and insures uniform heating of the rooms. Saves running up and down the cellar stairs during quick-changing weather. (If you have a boiler without this regulator be sure to write us for full particulars.) Ask also for our new edition of "Ideal Heating" (free) which tells all the *advantages* of the world-famous IDEAL Boilers and AMERICAN Radiators.

If you want to make your home a haven of warmth, don't wait until you build, but comfort your present house with an outfit of IDEAL Boilers and AMERICAN Radiators. Put in now without disturbing your old heaters until ready to start fire in the new.



LEFT-OVER MEATS MADE APPETIZING

Cookery Hints That Enable You to Serve a Satisfying Hot Dinner Instead of a Cold Lunch.

By **MARY JANE McCLURE**

MANY housekeepers look helplessly at the cold roast beef, lamb, etc., left after the first meal. They know that the family will not relish a dinner made from its cold slices, but don't know what else can be done with it.

Take a lesson from the skillful and thrifty German cook and provide yourself with a jar of Armour's Extract of Beef. Then rejoice when your roast is large enough to provide for a second dinner, for without labor you may serve a savory meat dish more delicious than the original.

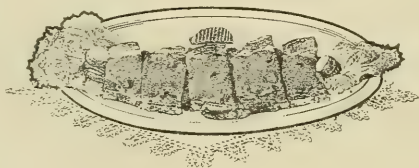
Rub a teaspoonful of butter and a tablespoon of flour together in a saucepan, adding a cup of hot water and finally a *quarter of a teaspoonful* of the Beef Extract. Use a light hand, for Armour's Extract is the strongest made, and it is easy to

get in too much. Chop or slice your meat and drop it into this rich sauce and let it get thoroughly hot. Serve with French fried potatoes and see if your family don't vote you a veritable chef.

Any left-over meat is delicious served in this way. Roast beef, mutton, lamb or veal, even chicken or game.

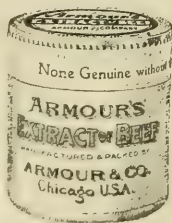
Foreign cooks know the virtue of Armour's Extract of Beef and would not dream of trying to do without it. It is one of the secrets of setting an economical table while appearing lavish.

It gives richness and flavor to the cheaper cuts of meat—saves boiling meat for soup stock—is the basis of rich gravies and sauces. Remember that a little goes a long way—it is the *concentrated* beef essence—the strength and flavor that *you* cook out.



Armour's Extract of Beef

Four times as strong as the ordinary or after-dinner coffee spoon or butter—the touch that gives sauces, gravies and spreader free—Wm. Rogers & Sons' AA, the highest grade of extra plate. You can't buy anything like them, and each will bear any initial you wish. Our usual limit is six, but for a time we will allow each family to get one dozen. Remember to send ten cents with every certificate or cap. This offer is made only to those living in the United States.



Department 38

CHICAGO

ARMOUR AND COMPANY

CHICAGO



(80)

A United Nation



Millions of people touch elbows and are kept in constant personal contact by the Bell System.

There are all kinds of people, but only one kind of telephone service that brings them all together. They have varying needs, an infinite variety, but the same Bell system and the same Bell telephone fits them all.

Each Bell Station, no matter where located, is virtually the center of the system, readily connected with other stations, whether one or a thousand miles away.

Only by such a universal system can a nation be bound together.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

A LIVING FROM POULTRY

\$1,500.00 from 60 Hens in Ten Months on a City Lot 40 Feet Square

TO the average poultryman that would seem impossible and when we tell you that we have actually done a \$1500 poultry business with 60 hens on a corner in the city garden 40 feet wide by 40 feet long, we are simply stating facts. It would not be possible to get such returns by any one of the systems of poultry keeping recommended and practiced by the American people, still it can be accomplished by the

PHILO SYSTEM

THE PHILO SYSTEM IS UNLIKE ALL OTHER WAYS OF KEEPING POULTRY

and in many respects just the reverse, accomplishing things in poultry work that have always been considered impossible, and getting unheard-of results that are hard to believe without seeing.

THE NEW SYSTEM COVERS ALL BRANCHES OF THE WORK NECESSARY FOR SUCCESS

from selecting the breeders to marketing the product. It tells how to get eggs that will hatch, how to hatch nearly every egg and how to raise nearly all the chicks hatched. It gives complete plans in detail how to make everything necessary to run the business and at less than half the cost required to handle the poultry business in any other manner.

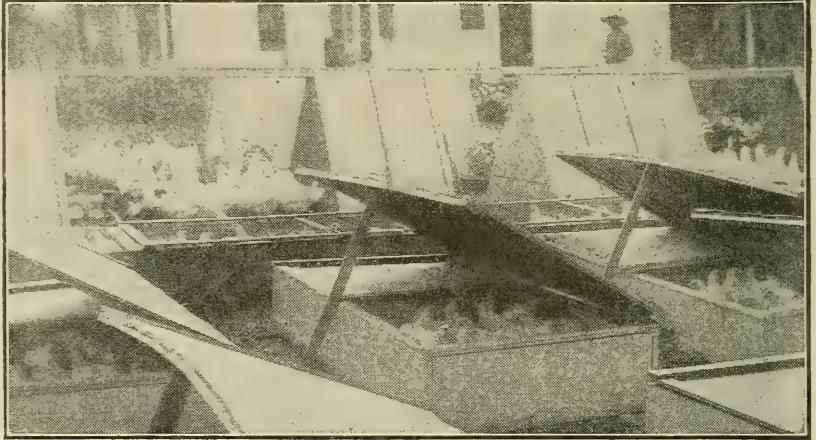
TWO-POUND BROILERS IN EIGHT WEEKS

are raised in a space of less than a square foot to the broiler without any loss, and the broilers are of the very best quality, bringing here 3 cents a pound above the highest market price.

OUR SIX-MONTH-OLD PULLETS ARE LAYING AT THE RATE OF 24 EGGS EACH PER MONTH

in a space of two square feet for each bird. No green cut bone of any description is fed, and the food used is inexpensive as compared with food others are using.

Our new book, THE PHILO SYSTEM OF POULTRY KEEPING, gives full particulars regarding these wonderful discoveries, with simple, easy-to-understand directions that are right to the point, and 15 pages of illustrations showing all branches of the work from start to finish.



Three-pound Roasters Ten Weeks Old

DON'T LET THE CHICKS DIE IN THE SHELL

One of the secrets of success is to save all the chickens that are fully developed at hatching time, whether they can crack the shell or not. It is a simple trick and believed to be the secret of the ancient Egyptians and Chinese which enabled them to sell the chicks at 10 cents a dozen.

CHICKEN FEED AT 15 CENTS A BUSHEL

Our book tells how to make the best green food with but little trouble and have a good supply any day in the year, winter or summer. It is just as impossible to get a large egg yield without green food as it is to keep a cow without hay or fodder.

OUR NEW BROODER SAVES 2 CENTS ON EACH CHICKEN

No lamp required. No danger of chilling, over-heating or burning up the chickens as with brooders using lamps or any kind of fire. They also keep all the lice off the chickens automatically or kill any that may be on them when placed in the brooder. Our book gives full plans and the right to make and use them. One can easily be made in an hour at a cost of 25 to 50 cents.

TESTIMONIALS

SOUTH BRITAIN, CONN., April 19, 1909.

MR. E. R. PHILO, ELMIRA, N. Y.

DEAR SIR:—I have followed your system as close as I could; the result is a complete success. If there can be any improvement on nature, your brooder is it. The first experience I had with your System was last December. I hatched 17 chicks under two hens, put them as soon as hatched in one of your brooders out of doors and at the age of three months I sold them at 35c. a pound. They then averaged 2 1-2 lbs. each, and the man I sold them to said they were the finest he ever saw and he wants all I can spare this season.

Yours truly,

A. E. NELSON.

ELMIRA, N. Y., Oct. 30, 1909.

MR. E. R. PHILO, ELMIRA, N. Y.

DEAR SIR:—No doubt you will be interested to learn of our success in keeping poultry by the Philo System. Our first year's work is now nearly completed. It has given us an income of over \$500.00 from six pedigree hens and one cockerel. Had we understood the work as well as we now do after a year's experience, we could have easily made \$1,000.00 from the six hens. In addition to the profits from the sale of pedigree chicks, we have cleared over \$500.00 running our Hatchery plant consisting of 66 Cycle Hatchers. We are pleased with the results and expect to do better the coming year.

With best wishes, we are,

Very truly yours,

(MR.) C. F. GOODRICH.

Special Offer Send \$1.00 for one year's subscription to the POULTRY REVIEW, a monthly magazine devoted to progressive methods of poultry keeping, and we will include, without charge, a copy of the latest revised edition of the Philo System Book.

E. R. Philo, 2401 Lake St., Elmira, N. Y.

The Softest Hosiery Made

Put a hand inside a Holeproof Sock and notice the *fineness* of it, the soft silky yarn, the pliability of the texture and the neat, snappy style in color and weave. Then take a pair home and notice how closely they hug every inch of the ankle and foot. Judge "Holeproof" *then*—not before you have done this.

Judge by the Facts

Don't judge them by what you have heard of some hose or by inferior guaranteed brands. The genuine "Holeproof" has no real rival. It has taken us 32 years to perfect it. No imitation—sprung up in a night—will ever be able to compete with "Holeproof." Twelve years ago we discovered that the hose we were making could be guaranteed. We at once sold them that way and their success was phenomenal from the very first.

Yarn at 70c per Pound

Our yarn is the finest 3-ply Egyptian and Sea Island Cotton Yarn that's made. It costs on the average, 70c per pound.

We could buy domestic yarn and save 30c per pound—or we could use common cotton and pay even less. But the hose would be heavy, coarse, and ill fitting.

"Holeproof" is the finest hosiery made—*soft, light and stylish*. Try it today. Six pairs guaranteed for six months.

FAMOUS Holeproof Hosiery FOR MEN WOMEN AND CHILDREN

The genuine "Holeproof" is sold in your town. We'll tell you the dealer's name on request or we'll ship direct where we have no dealer; charges prepaid on receipt of remittance.

When buying look for the trade-mark above and for the name "Holeproof" on the toe. Then you are sure of getting the genuine—the original guaranteed hose. Prices \$1.50 to \$3.00 for six pairs guaranteed six months. Three pairs silk sox, guaranteed three months, \$2.00. Women's stockings, \$2.00 to \$3.00 for six pairs. Children's, \$2.00 for six pairs.

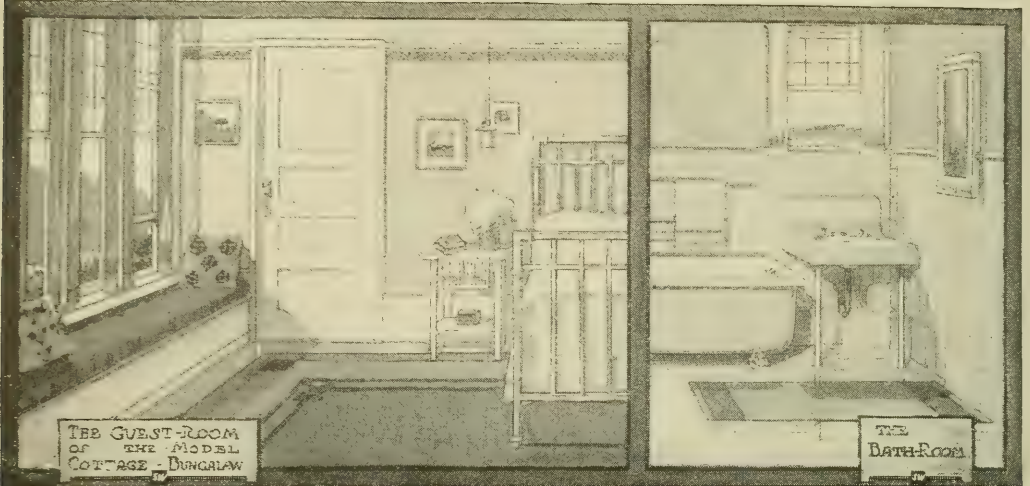
*Send for free book,
"How to Make Your Feet Happy"*

The Holeproof Hosiery Company
539 Fourth Street, Milwaukee, Wis.

Tampico News Co., S. A., City of Mexico, Agents for Mexican Republic

Are Your Hose Insured? (88)

Stencil No. 45



Stencil No. 39

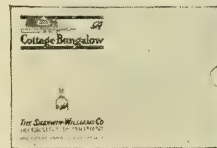
Your guest-room and your bath-room may be made just as attractive as those shown in color in the Sherwin-Williams' Cottage Bungalow Portfolio, which is sent free on request.

VERY few people have any adequate idea of the beautiful and durable effects that can be produced simply and inexpensively by the use of the right paints, varnishes, stains, etc., in and about the home. For your information we have prepared this special Portfolio of ten color plates which illustrate a complete plan of decoration adaptable to the average house. Complete specifications are given to produce the effects shown, not only for the finishing of the walls, ceiling, woodwork, floors, etc., but also suggestions for the curtains and draperies, the rugs and furniture.

You can adapt any or all of the color combinations in our Cottage Bungalow or our Decorative Department will prepare special suggestions upon receipt of blue prints, drawings or descriptions of your home or other buildings.

If you are interested in home decoration, by all means send for this Portfolio today. Sent free on request.

GET THIS PORTFOLIO AND MAKE YOUR HOUSE BEAUTIFUL, TOO



It has pictures in color of each separate room similar to those shown on this page and several exteriors. Each one is accompanied by specifications for painting or otherwise treating the walls, floors, ceilings

and woodwork, and definite suggestions for curtains, hangings, rugs and furniture. The outside suggestions include color schemes for the house to harmonize with any given background or setting, also definite suggestions for beautifying the grounds.

A STENCIL BOOK FREE

Stenciling is an inexpensive and simple method of decorating flat walls, curtains, draperies and hangings. Our stencil book, sent free, shows hundreds of stencil designs at small cost, and tells how to use them.



SHERWIN-WILLIAMS PAINTS & VARNISHES

Address all inquiries to the Sherwin-Williams Co., Decorative Dept., 616 Canal Road, N. W., Cleveland O.

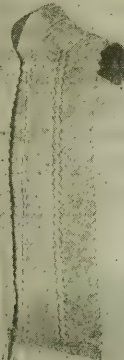
REGISTERED

"The Bradley"

TRADE MARK



NO. 301 50¢



NO. 302 \$1.50



NO. 1050 \$5.00

BRADLEY

Full-Fashioned
Mufflers and
Auto Scarfs

(Patented 1908-1909-1910)

are for men, boys, women and girls. They're made in all collar sizes and in many different shades. Having the original Bradley V-neck, these mufflers and scarfs fit more perfectly than any others, conforming to the shape of shoulders, neck, back and chest, without a wrinkle. They cannot crawl up, grow stringy or rag-like. Made from best grade of yarns. Look for our trade-mark attached just under the clasp.

No. 301 is the original Bradley muffler, made in twenty beautiful shades, from high-grade imported Egyptian silk. Packed in individual boxes. Clasp matches the shade. Sold everywhere at..... 50¢

No. 302. The original Bradley Full-Fashioned Auto Scarf in fifteen shades. Extra long and wide with fringed ends and ocean-pearl clasp. Knitted from pure Australian worsted. Price at the best dealers..... \$1.50

No. 303. Our new Dress Scarf. Just like the muffler in shape, but wider and much longer. Made from highest grade Egyptian cotton in fifteen shades.

Price..... \$1.00

No. 310. The Bradley Coat Scarf, with wide collar that is worn turned up or down; all-wool; three ocean-pearl clasps. Looks like a knit coat when outer coat is buttoned. All shades and sizes; very handsome. Price..... \$1.75

No. 1050. Our Co-ed Coat in great demand by school and college girls. Made of pure worsted. It's jaunty, smart and attractive. Several colors. Price..... \$5.00

No. 930. Motor Coat of finest double pure worsted yarns. Hand knit and full fashioned. A coat every man appreciates. Price..... \$8.00

YOUR BEST DEALER can supply you with Bradley products. If we are mistaken in that statement, send us the price and we'll see that you are promptly supplied.

BRADLEY

KNITTING CO.

113 BRADLEY STREET
DELAN, WISCONSIN



NO. 303 \$1.00



NO. 310 \$1.75



NO. 930 \$8.00

REGISTERED

"The Bradley"

TRADE MARK



YOU SAVE THE MOST MONEY

When you buy your piano direct instead of purchasing from the middleman—the salesman—the agent—the dealer. They can in no way add to the quality of the pianos they sell—but they surely do add to the price which the music lover must pay. The dealer's, agent's—go-between's high profits and selling expenses—may not be escaped unless you buy your piano from a company which refuses to permit its pianos to be sold in any other way except direct to the homes of music lovers. Thus the stand of the Schmoller & Mueller Piano Co.—selling the Schmoller & Mueller piano direct, instead of through middlemen—means the saving of all go-between profits—all unnecessary selling expense and giving to each one of its patrons—a dollar's worth and more of quality for each dollar invested in the Schmoller & Mueller Piano. You thus are certain under our direct-to-the-home selling plan to

Secure the Utmost in Quality

in the Schmoller & Mueller Piano purchased from this company. You secure a piano backed by a company fifty-one years old—with a capital and surplus of half a million dollars which furnishes a piano built so well—so durable in every part as to make possible the longest and the strongest of guarantees. The Schmoller & Mueller Piano is Guaranteed for twenty-five years—an entire quarter of a century. Where can you secure an instrument like unto the

Sweet Toned Schmoller & Mueller Piano

Unless you buy direct? Dealers—agents—salesmen cannot supply you. We sell direct—we guarantee our pianos—we save you from \$100 to \$150 on your Schmoller & Mueller Piano as compared with prevailing middlemen's prices. Yes, we go even further than to save you money—and to furnish the most in quality for your money—we make terms of payment so liberal—as to remove the last single objection to such a purchase—when you are given the opportunity to buy this Sweet Toned SCHMOLLER & MUELLER PIANO

On Payments of 15c. a Day

Can you realize what that means to you—to your loved ones—to have within your home all of the benefits to be derived from the possession of this High Grade—this Durably Built—this Sweet and Mellow Toned Schmoller & Mueller Piano. Secure right now before you turn this page—full information about the Schmoller & Mueller Piano and our unapproachable Selling Plan. Do this by filling out the attached Coupon and mailing back today for Complete Catalogue and Proposition. Send your Coupon to

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Dept. A. C. 010 OMAHA, NEB.
Est. 1859 Capital and Surplus, \$500,000.00

Schmoller & Mueller Piano Co.,
Dept. A. C. 010, Omaha, Neb.

Send your Catalogue and All Information about the Schmoller & Mueller Piano. I am interested.

Name.....

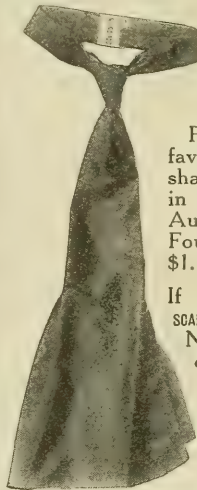
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Auerbach's SOLIDSILK SCARVES were awarded a medal for Quality, Style and Workmanship at the Paris Exposition.

They are the scarves of the best dressers and are sold in the best shops.



SOLIDSILK SCARVES



Two Grades
50 cents and \$1

A label with the word SOLIDSILK on the Four-in-hand or Tie you buy tells you it is the best. Look for the label.

Plain colors are popular. Your favorite is among the 50 plain shades, black and white included, in Auerbach's SOLIDSILK Rep and Auerbach's new SOLIDSILK Baratheia Four-in-hands at 50 cents and \$1. Bat Ties at 50 cents.

If your dealer hasn't SOLIDSILK SCARVES mail your order to us. Name color and shape and enclose price. Money back if you are not satisfied.

Write for our card of 50 colors. It's free.

The shop that sells Auerbach's SOLIDSILK plain colors has an excellent assortment also of fancy SOLIDSILK SCARVES.

LOUIS AUERBACH
842, 844, 846 Broadway New York

A CHOCOLATE OF RARE QUALITY

Kuyler's
METROPOLITAN CHOCOLATE
NEVER HAD AN EQUAL **NEVER WILL HAVE**
A CHOCOLATE FOR CHOCOLATE CONNOISSEURS **HIGHEST IN QUALITY, SMOOTHNESS AND FLAVOR**
TEN CENTS & FIVE CENTS SOLD EVERYWHERE

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ON CREDIT LOFTIS SYSTEM

LET US SEND YOU A DIAMOND OR WATCH ON FREE TRIAL

Write for Our New Catalog containing over 1500 beautiful photographic illustrations of Diamonds, Watches and Artistic Jewelry. Select any article you would like to own or present as a gift to a loved one; it will be sent on approval to your home, place of business, or express office, without any obligation whatever on your part. If it is satisfactory in every way, pay one-fifth down and keep it, balance in eight equal monthly amounts. If not entirely satisfactory, return it. We pay all charges and take all risks. We have absolute faith in our goods because we know they are the very best quality and highest grade of workmanship. **An Account With Us** is a confidential matter. Our customers use their charge accounts with us year after year, finding them a great convenience at such times as birthdays, anniversaries, engagements, weddings, graduation, etc.

Diamonds as an Investment are better than a savings bank because they pay four times the rate of interest. They increase in value from 15% to 20% each year. Our prices are lowest; our terms are easiest. We allow 8% discount on all cash orders. Send today for a free sample copy of the Loftis Magazine, devoted to "Styles and Stories of Diamonds, Precious Stones, Fine Watches and Artistic Jewelry."


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No. 44

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Ladies' and Gentlemen's
Diamond Rings, \$11.00
down; \$5.50 per month

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BROS. & CO.**



English Knock-a-bout

\$1 This English Knock-a-bout Hat is the noblest and most comfortable hat you can buy at any price for business, travelling, motoring, golf and all outdoor sports. Its made of genuine English felt, has flexible sweat band, and will wear like iron. Can be rolled up without damaging. When you send on dollar for this hat we want you to set your expectations up to the very limit and you'll not be disappointed. All sizes in black, blue, brown, white and gray. If not exactly as represented—drop us a line and we will refund your dollar by return mail—AND YOU MAY KEEP THE HAT. You can "lose"—send us a dollar TO-DAY and hat will be forwarded postpaid.

PINCO IMPORT CO., Dept. 4 28 S. William St., N.Y.



Credit!

It is simply marvelous how easy we make it for you to own a genuine diamond. Don't be satisfied with anything but the best pure white stone; buy a stone that will increase in value. We offer you such a gem at the wholesale jobber's price on the easiest terms ever made by a high-class Diamond House. The above cut shows the exact likeness of our \$75 ring, which we sell on terms of \$15 down and \$7.50 per month. We have built up a tremendous business on the liberal

Wholesale Price—Easy Payment Plan
and we want to show you how we can save you money and give you perfect satisfaction, when you want to buy **Diamonds, Watches and Jewelry**. Our handsome new catalogue, profusely illustrated, is yours free. Write today for this free catalogue and OUR SPECIAL PLAN.

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This Suit, Tailored \$15 to Your Measure

Express Prepaid

Other suits and overcoats in a wide selection of exclusive weaves and latest New York styles, \$12.50 to \$30.00.

I am a custom tailor—a maker of guaranteed clothes to special order. I will make a stylish suit or overcoat to your measure—with **true quality** tailored into every stitch and seam—and charge you less than you have to pay for clumsy-looking, ready-made garments.

I Take All Risk

I save you the dealers' big profits and give you the kind of clothes turned out by the high-priced tailors of the big cities.

Send today for my handsome free book of styles and cloth samples. Measure yourself by my extremely simple home system, pick out the style and material you like best and send me your order. I'll make up the clothes **exactly to your measure**—and ship them **express prepaid**. You examine them carefully to see that they fit perfectly and come up to my claims in every particular. If you don't find everything **entirely satisfactory**, send back the clothes and I'll return every penny of your money.

That's my guarantee. And my Bankers. The Wisconsin National Bank of Milwaukee, (Reserves, Twenty Million Dollars) will tell you that I always keep my word.—KING

My Style Book is FREE. Send for it today.

King Tailoring Company

204 West Water St., Milwaukee, Wis.



Use the Improved Never Fail Stropper

Whether you use a safety or old style razor, you'll have keener edged blades and smoother, easier shaves with the **self adjusting IMPROVED NEVER FAIL STROPPER**

For 15 Days FREE

Enjoy shaves of this kind 15 days at our expense. Send no money. Just mail the coupon. If the stropper proves itself worth \$3 to you, send the money. If not, simply return the stropper.

THE NEVER FAIL CO. 606 Colton Bldg., Toledo, O.

Simply Mail the Coupon

Please send, prepaid, one Improved Never Fail Stropper for me to try. At the end of 15 days I agree to send you \$3 or return stropper.

Name _____
Address _____



SOUPS STEWS and HASHES are rendered very much more tasty and appetizing by using

LEA & PERRINS SAUCE

THE ORIGINAL WORCESTERSHIRE

A superior seasoning for all kinds of Fish, Steaks, Roasts, Game, Gravies, Salads, etc. It gives appetizing relish to an otherwise insipid dish.

Beware of Imitations.

JOHN DUNCAN'S SONS, Agts,
New York



RIDER AGENTS WANTED

In each town to ride and exhibit sample 1910 model. Write

for Special Offer. Finest

Guaranteed 1911 Models \$10 to \$27

with Coaster-Brakes and Puncture-Proof tires.

1909 and 1910 MODELS \$7 to \$12

ALL OF BEST MAKES... 100 Second-Hand Wheels

All makes and models, good as new

Great Factory Clearing Sale. \$3 to \$8

We Ship on Approval without a cent

deposit, pay the 10 Days' Free Trial

TIRES coaster-brake wheels, lamps, and

sundries, half usual prices. DO NOT

BUY till you get our catalogue and offer. Write now.

MEAD CYCLE CO. Dept. R 31 CHICAGO

Railroad Men, Attention

The REASON why YOU should buy from US

Any 21-Jewel Hamilton, Hampden, Elgin, Waltham,

Bunn Special, Vanguard, Crescent Street,

fitted in any 20 year case, only \$18.00

All the above movements are warranted to stand a

rigid railroad test or money refunded. A SAVING of

50 per cent off regular prices is assured.

M. L. COHEN & CO., 29 Washington Ave. South, Minneapolis, Minn.

Established 1879. The largest retailers of Railroad Watches at wholesale

prices in the Northwest. Mail orders promptly filled.

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\$11.45

Buys This 17-Jewel Elgin

In a Fine 20-Year Gold Filled Case

Sent Prepaid on FREE TRIAL at Our Bed Rock Wholesale Price.

BIGGEST BARGAIN EVER OFFERED

only \$1 a Month

Our Elgin Watches are so well known and our CREDIT PLAN so easy, that no matter where you live or how small your wages, WE WILL TRUST YOU, so that you and every honest man and woman can own a Diamond or High-Grade Elgin Watch in a beautiful Guaranteed 25-Year

Gold Case and wear it while paying for it in such small payments that you never miss the money. WRITE TODAY FOR OUR BIG FREE WATCH AND JEWELRY CATALOG. It tells all about our easy credit plan and how we send Elgin 17-Jewel B. W. Raymond and 21 and 23-Jewel Elgin Veritas everywhere on Free Trial, without security or one cent deposit. Positively Guaranteed to Pass Any Railroad Inspection.

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Or, 1354 WALNUT STREET, KANSAS CITY, MO.

The House that Sells More Elgin Watches than Any Other Firm in the World.



"PRAIRIE GIRL"

This photograph (greatly reduced) shows a portion of our famous "Prairie Girl" picture. This handsome work of art is reproduced in twelve colors exactly like the original in all its brilliant colors typical of the Golden West. The black and white miniature gives you no idea of the exquisite coloring and beautiful tones in the figure and mountainous background.

This beautiful picture is printed on fine plate paper ready for framing or hanging. It contains no advertising and is equal to pictures costing \$1.50 or more in art stores.


Send ten cents in stamps or coin to cover postage for your copy of the "Prairie Girl". With it we will also send you our big profusely illustrated Gun Guide and Catalog, showing the most complete line of revolvers, rifles and shotguns made.

MAIL US TEN CENTS NOW. You will receive the beautiful "Prairie Girl" and the catalog by return mail postpaid.

THE HOPKINS & ALLEN ARMS CO.
58 CHESTNUT STREET, NORWICH, CONN.



Here's a Good JOB



for

YOUNG MEN

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In Automobile Business

Chauffeurs, Automobile Salesmen, Demonstrators and Repairmen are in big demand everywhere. The field is new, work pleasant, and anyone can learn. We teach you in 10 weeks of study during spare time to become thoroughly efficient. Our course of instruction by mail is simple, practical, and very interesting. Besides, we assist you to secure a good position.

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Don't miss this offer. Send us a postal to-day.

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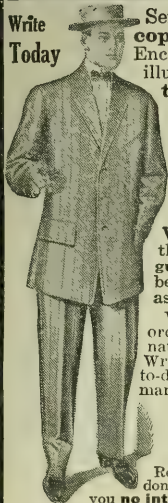
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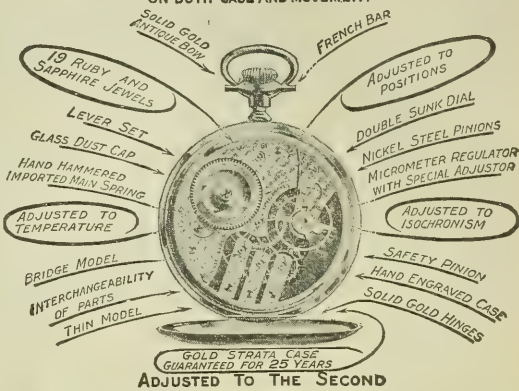
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(C)

(A)

(B)

(D)



“Love at First Sight!”

Note—Pictures now ready for delivery

“Why so much frowning?” asked a friend as he paused at the door of the writer’s office.

“Because I can’t find the right words to tell the magazine readers how really beautiful and valuable are the 1911 ‘Pompeian Beauties’ in colors. You see, each ‘Pompeian Beauty’ is really worth \$1.50 to \$2.50,” I replied.

“Oh, I see,” he laughed, “can’t make the public understand how you can give a \$1.50 picture in colors for 15 cents, eh? Well, charge ‘em a dollar. Maybe that will make ‘em sit up and observe. Let’s see the pictures.” I pointed to the wall behind him. “Those! Those for 15 cents apiece!” His voice indicated his own unbelief.

“There you are!” I laughed. “Won’t believe me yourself. Just 15 cents apiece. But which is your choice?”

“That one for me!” he said. “No, wait a moment. That one! No, I—I—say—I love ‘em all! They’re great! They’re wonderful! Just say in your ad that it’s a case of love at first sight for every single one of them! They are all heart-breakers! If the public could only see them in their real sizes and colors you’d be swamped!”

Yes, it is a case of “love at first sight” for those who see them in their true and exquisite colors. Then the question is: Which “Pompeian Beauty” would you rather have on your walls? Any one is worthy of a fine frame. Yes, you may order several if you can’t decide on one. You run no risk. Read our “money back” guarantee.

Why \$1.50 is not charged: The manufacturers of Pompeian Massage Cream want to make you so delighted with each picture you get that you can never forget who gave it to you, for each picture is practically a gift, the 15 cents being charged to protect ourselves from being

overwhelmed. We get our reward through years to come, and from the good will and confidence thus established. You get your reward at once.

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“Don’t envy a good complexion; use Pompeian and have one.” This is the advice of men and women (in a million homes) that use Pompeian Massage Cream. At all dealers; trial jar sent for 6 cents (stamps or coin). You may order pictures, trial jar, or both.

Our 1911 Pictures. Each “Pompeian Beauty” is in colors and by a high-priced artist, and represents a type of woman whom Pompeian helps to make more beautiful by imparting a natural, clear, healthy complexion.

Our Guarantee. If you are not satisfied that each copy of any “Pompeian Beauty” has an actual art store value of \$1.50 to \$2.50, or if for any reason you are disappointed, we will return your money.

NOTE—The handsome frames are only printed (but in colors) on pictures A and B. All four have hangers for use if pictures are not to be framed. Only artist’s name-plate on front as above.

Pompeian Beauty (A) size 17"x12"; (B) size 19"x12"; (C) size 32"x8"; (D) size 35"x7".

NOTE—Pompeian Beauty D went into a quarter of a million homes last year, and the demand for it is still heavy.

Final Instructions: Don’t expect picture and trial jar to come together; don’t expect reply by “return mail” (we have 20,000 orders on some days). But after making due allowance for distance, congestion of mails, and our being overwhelmed at times, if you then get no reply, write us, for mails will miscarry and we *do* replace all goods lost or stolen. Write plainly on the coupon only. You may order as many pictures as you wish for yourself or friends.

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Read this coupon carefully before filling out your order.
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Gentlemen:—Under the letters (or a letter) in the spaces below I have placed figures (or a figure) to show the quantity I wish of one or more of the four “Pompeian Beauties.” I am enclosing 15c. (stamps or money) for each picture ordered.

P. S.—I shall place a mark (x) in the square below if I enclose 6c. extra (stamps or coin) for a trial jar of Pompeian.

Write *very* carefully, fully and plainly on coupon only.

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Mark the coupon and so take the first step toward joining the thousands who have won permanent success through I. C. S. help. On an average 300 VOLUNTARILY report advancement every month. During July the number was 302. Mark the coupon.

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Employed by..... R. R.
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all ticking at the
same time!**



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Ingersoll watches are made in four styles, 1st, the famous Dollar watch; 2nd, “The Eclipse” which sells for \$1.50; 3rd, the Junior, a medium-sized watch with a thin, graceful case, costing \$2.00; and 4th, the little Midget, the ladies-model Ingersoll, also at \$2.00.

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THE RAILROAD MAN'S MAGAZINE

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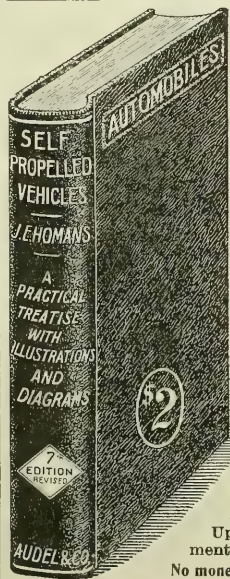
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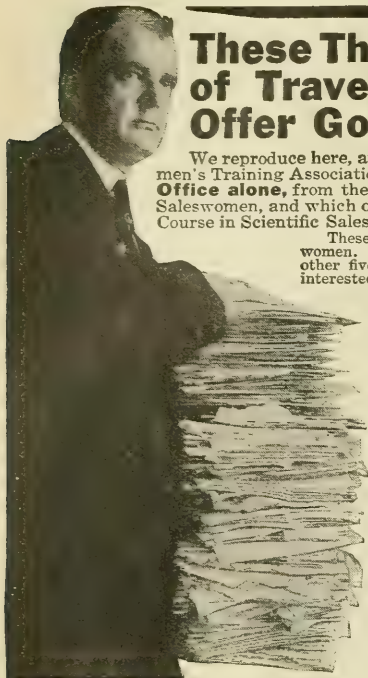
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Scant cup granulated sugar, rounding table-spoonful "Simon Pure" Leaf Lard, cupful sweet milk, two eggs, one-fourth teaspoon salt, one-fourth teaspoon nutmeg, four cupfuls flour, four rounding teaspoonfuls baking powder. Sift the baking powder with the flour and add the nutmeg, cream the lard and sugar, add eggs and beat thoroughly; then add the milk and flour. More flour should be added on the kneading board until the dough can be rolled out one-fourth of an inch thick and retain its shape when cut. Cut and fry in Armour's "Simon Pure" Leaf Lard.



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Look closely at the label, for it means much to you. The name Armour stands for highest quality, and the words "Leaf Lard," under Government ruling, can only be applied to lard from the leaf fat—the best. So be sure the label reads Armour's "Simon Pure" Leaf Lard.

THE RAILROAD MAN'S MAGAZINE

Vol. XIII.

NOVEMBER, 1910.

No. 2.

Tales of the Tallow-Pots.

BY TOM JACKSON.

IF you think that a fireman can't spin a yarn that is full of real ginger with tobasco trimmings, just read this bunch, by Tom Jackson, which we have selected to open the Thanksgiving number of THE RAILROAD MAN'S MAGAZINE. They contain just the sort of spice that one expects to find in all things at this feasting time of the year.

It is a pretty ordinary railroad happening in which a diamond-pusher fails to figure in some way or other. When it comes to excitement, he is generally Johnny-on-the-spot, and he is the hero of as many hair-raising adventures as any other member of the crew.

Most of these tales were gathered at the recent Brotherhood Convention held in St. Paul, Minnesota, where the boys assembled in large numbers.

**In a Dakota Blizzard—The Two Johns—Why a Mail Clerk Became a Sleuth
—The Troubles of a Smokeless Hog—How "Kim"
Met the Governor.**



HERE is a fireman's story of a Dakota blizzard:

"The beautiful snow was swirling round our train in chunks. It was thirty-five degrees below zero, and the wind was blowing a hurricane.

"The only air we could see from the cab window was absolutely white air, and we couldn't see so awful much of that. Most of the time we two in the cab couldn't see the nose of the engine. In a particularly clear swirl of snow, we sometimes were able to make out a large-sized section-house, as far away as a hundred feet.

"It was on the division out of Fargo west-

ward. The Great Northern was spending five hundred dollars a day just to keep the track clear on that one division. We crawled along, never faster than ten miles an hour, and we were all day getting over the division.

"My engineer liked to keep his conversation consistent with our surroundings—he would talk of nothing but polar expeditions.

"Well, we slowed down to four miles an hour, and strained our eyes on the lookout for an expected station and a water tank. The engineer was dopping out the reason why polar bears are white, when suddenly, I interrupted him by shouting:

"We just passed the station! We'll have to back down and find it again!"

"When we finally got next to that station, I went in and sat down by the stove. The station-agent said:

"I'm going to sleep on the floor of this office to-night."

"But your rooming house is only a hundred steps up the road," I replied.

"True," he said. "But look at the prevailing atmosphere within that hundred steps. After dark you can't see even the headlight of an engine. Is there any certainty, then, that a lantern in front of my house would guide me?"

"Do you know what happened to a section-hand out here last night? It's gospel truth. He was walking track and happened to step out from between the rails. He didn't step more'n two feet from the track, of that he is sure, yet he walked round and round in a circle all the rest of the night, trying to find the track again.

"So I'm not taking any chances in finding my room, even if it is only a hundred steps away. I'll sleep here."

"We then crawled up to the water tank. I pulled the spout down and let in the water. As I shoved the spout up, a voice in the blizzard said:

"Do you know your wheels are frozen to the rails?"

"It was the voice of Superintendent Jim Davis—the same Jim Davis who is now general superintendent of the Oregon Short Line.

"He was on the train during all our trouble with the blizzard that day, and a better railroader never lived. He even helped us with the hand-picks, in chopping the engine free from the rails. For, sure as you're born, in those few minutes the drippings from the spout had frozen and we were held so fast to the track by the ice that we had to chop for a quarter of an hour before we got loose.

"Maybe it wasn't chilly to the extent of some forty below zero, when we reached the next tank. I pulled the spout down and let the engine drink its fill. Then I tried to push the spout up. I say tried, because I never did push that spout up within the same hour in which I pulled it down. I did not comprehend what had really happened till a voice out of the blizzard cried:

"It's frozen fast and you can't turn off the water, and we're going to lose every gallon in the tank!"

"It was the voice of Superintendent Davis again.

"He was right, too. I couldn't stop the flow of water. I couldn't raise the spout be-

cause it was frozen fast to the intake. So the water from the tank flowed on and on till the last gill of sixty thousand gallons left the tank empty.

"Well, what was the effect? As fast as the water flowed down around us it turned to ice till we found our drivers frapped in an iceberg four feet high.

"We had to chop ourselves out with hand-picks again. This time we needed the assistance of all the available section hands. It took us fully two hours to chop our drivers free of the rails.

"We proceeded once more. Night was coming on fast. Suddenly my engineer stopped dead and said:

"A drift ahead. This will about be our finish."

"It was our finish, too. The section-men refused absolutely to take out the work-car or to leave the section-house. They declared they wouldn't venture outdoors again till the blizzard eased up a little.

"That's insubordination," said my engineer to Superintendent Davis. "Why don't you fire those men?"

"What would be the use?" Mr. Davis replied. "New men would insist upon staying in by the stove, just the same as these men are doing."

"Well, then, offer them money."

"The Great Northern Railroad and Jim Hill together haven't money enough to induce those men to come out, once they have proclaimed their intention of staying in till the blizzard is over."

"What's to do, then?"

"Nothing but grin and bear—till further notice."

"We backed to the nearest station and lay there till morning, by which time the blizzard had lost half its force, and the section-men came out and cleared the track.

"Let me tell you something about that drift that may seem incredible. What you think caused it? The section-foreman told us that he was puzzled because that part of the track lay in such a position that no drift had ever been known to pile up at that particular point.

"When they got the track free of the drift they discovered that it was caused by a piece of coal no larger than an orange, which had fallen from a tender.

"The snow up there is as dry as flour, and any little object on the right-of-way will start a drift. Unless we find the object that started a drift, it will make trouble for trains all winter. That's why, in the fall, gangs



IT TOOK US FULLY TWO HOURS TO CHOP OUR DRIVERS FREE OF THE RAILS.

of men go over the right-of-way picking up every stone big as a chestnut and pulling out every weed more than two inches high.

"Well, I reckon, you can guess now that a Dakota blizzard doesn't do a thing to the railroads."

The Two Johns.

The Convention of the Brotherhood of Locomotive Firemen and Enginemen, held in St. Paul last summer, brought delegates from every State. There were over 750 present—the largest meeting the Brotherhood ever held.

In addition, there were some three hundred wives, sisters, and daughters of the firemen present.

The result was this: During the month of June, locomotive firemen, wearing the badges of their order, were as thick in St. Paul as colonels in Kentucky, while ladies wearing the insignia of the auxiliary were as plentiful as brides at Niagara in the same month.

One day the convention was addressed by James J. Hill, just plain "Jim Hill," as he was called by "Bill" Carter, president of the Brotherhood, who introduced the builder of the Northwest Empire.

The day following Mr. Hill's address I was standing outside the auditorium where the convention was held, talking to one of the delegates, who said:

"Jim Hill, yesterday, told us firemen that we must save our money, 'because,' he said, 'the worst is yet to come in this country.' He said that we must save for the sake of our wives and children.

"Well, Jim Hill's remarks reminded me of a fireman I knew in Chicago. His name was John Allen, and he had a run on the Chicago and Northwestern.

"By a strange coincidence, the name of the engineer who was this fireman's cab-mate was also John Allen.

"John Allen, the fireman, never would save a cent. Money slipped through his hands, like gravel through a sieve. One day his engineer said to him:

"'John Allen, so long as you can't save money, why don't you carry life insurance, same as I do, so as to provide for your wife in case of accident.'

"'John Allen,' replied the fireman, for they always addressed each other by both their names, 'what's the difference whether I

spend all my money for things I need and enjoy, or spend it all for insurance premiums like you do? You have never saved a cent. You hand out all your spare cash for life insurance.'

"'True, John Allen,' said the engineer. 'But then—the more I spend in that way now, the more my wife will get when I am numbered among the soldiers who perished on the battlefields of the rail.'

"Well, John Allen, the engineer, kept on taking out more and more life insurance, till he had some thirty-five thousand dollars' worth of policies. All the men of the engineers' brotherhood who heard of John Allen's insurance habit marveled as the total grew higher and higher.

"Then, one day in March, 1910, along came a life-insurance agent who found Fireman John Allen at the roundhouse and said to him:

"Is this Mr. John Allen?'

"That's me,' replied the fireman.

"Well, I hear you favor life insurance. Now let me place before you a proposition that you simply can't—'

"Hold up!' cried the fireman. 'You've got the wrong John Allen. You want that spendthrift engineer of the same name.

You'll find him over there in the switchman's shanty. He's easy. Go after him.'

"The next day, John Allen, the engineer, announced that he had taken out five thousand dollars more insurance, making a total of forty thousand.

"Why!' exclaimed the roundhouse foreman, when he heard the news, 'John Allen is now the highest insured locomotive engineer in the whole country—bet you anything you like.'

"It was so. John Allen, the engineer, carried higher life insurance than any other man of his trade.

"A few days after that the two John Allens were running their fast passenger train forty miles an hour, down near Flagg, Illinois, when—you can guess what happened. Bang! Into some standing freight-cars the passenger train plunged. Out of it, Fireman John Allen emerged alive, while in the wreck lay Engineer John Allen, dead.

"And forty thousand dollars was paid by the life-insurance companies to his widow.

"A few days later, Fireman John Allen walked into the roundhouse and said to the foreman:

"Give some one else my run to-day. I'm layin' off.'



THE PIECE OF COAL THAT MADE ALL THAT TROUBLE WASN'T BIGGER THAN AN ORANGE.

"'What's ailin' you?' asked the foreman.

"'Oh, nothin' particular. I'm just going to begin to-day to save a little money by spending all I earn.'

"He walked thoughtfully across-town to the office of that insurance-agent who had mistaken him for John Allen, the engineer. To the agent, John Allen, the fireman, said:

"'Perhaps it would be just as well if you were to let your doctor examine me for my wife's sake, just in case I should suddenly become included among the soldiers who perished. Say, John Allen was a wise, shrewd, far-sighted old spendthrift, wasn't he?'"

After the delegate to the fireman's convention finished telling me this tale, he hurried into the auditorium, only to reappear a moment later and sing out:

"Hey there, you! That yarn I just spun for you about the two John Allens cost me ten cents a minute."

"How's that?"

"Why, we made a new rule in here yesterday by which any man coming late to the daily meeting is to forfeit half a day's pay. I forgot all about it. We're each of us paid seven dollars a day for attending the convention. Well, I gabbed with you so long that I got in here thirty-five minutes late. It cost me a total of three dollars fifty—or one dime a minute. And Jim Hill begged us yesterday to save our money."

"Shut that door!" yelled a delegate inside the auditorium.

A Mail-Clerk Sleuth.

"Fermin Keyes was a railway mail clerk, but he should have been a railroad detective. He was a born sleuth."

So said one of the visiting engineers, who, though not a delegate, had been attracted to St. Paul by the convention.

"Fermin Keyes was a pal of mine," the engineer continued. "I had a run out of Los Angeles on the Southern Pacific, and Keyes's mail-car was usually attached to my train. We traveled together a great deal, his run being between Los Angeles and El Paso.

"One day in April, after pulling into the Espee depot in the City of the Angels, Keyes rushed up to the engine excitedly, and, pointing to one of the passengers who had just



AND YOU MEAN TO TELL ME YOU'RE GOING ON YOUR RUN NOW—DRESSED LIKE THAT?

left our train and was walking up the platform, said:

"'Paul, see that dapper-looking, pallid-faced, weak-kneed lunker? Well, he makes me think of a Cain.'

"'Fermin,' I answered, 'what is there about that ordinary tuberculer, of which there are billions in this southwest country, to make you think of a walking-stick?'

"'Oh, no! Not that kind of a Cain,' he said. 'I mean the sort of a Cain that slew Abel. Paul, I'm strangely interested in that young fellow. Hanged if I know why. He's got a cold eye, and there's something about his general appearance that comes out and hits me in the eye.

"'He boarded the train at Maricopa. I noticed him, and soon as I finished sorting my mail, I went into the day-coach and got into conversation with him. He's a department-store clerk by trade—and he's come here to Los Angeles looking for a job. I don't know why, but I'm going to follow him and see where he puts up.' He ran away.

"I believed that railway mail-clerk to be

suffering from what is called a vagary—and let it go at that.

"Next day, however, when I was about to pull out of the Espee depot, Keyes came up on a run and gave me this information:

"Paul," he said, "I read in the newspapers, last night, that the lunger I pointed out to you yesterday morning is a sure enough assassin. He murdered a man over in Tucson. This lunger, at the time, was known as Louis Etinge. There's a thousand dollars reward offered for his capture. Say, Paul, I'm going to get that thousand. Good-by."

"Then you're not coming on your run to-day?"

"No. I've taken a lay-off to get that thousand."

"When I returned to Los Angeles next day, there stood the railway mail-clerk waiting for me.

"I'm determined to get every dollar of that thousand all for myself," he said. "So I went to a detective agency and got sworn in as a regular detective. I've authority to arrest my man wherever I may find him in California."

"Where's the murderer?" I asked, coming to the point most important.

"Flown," answered Keyes. "I told you I'd find out where he stopped—and I did. I went to that place soon as I become a real sleuth—but he had gone. Yes, he's gone to San Pedro, and I'm going to take a train down there immediately. Good-by."

"Well, I didn't see Fermin Keyes again for many days after that. When he did show up at the station, he was dressed like a tourist. He carried a suit-case. Between his teeth was a perfecto.

"So you're back on the job, are you?" I said. "And you mean to tell me you're going on your run dressed like that?"

"Run nothin'," he answered. "I'm off on a vacation. Going to visit my friends in Tucson. Paul, I got the whole thousand."

"He then told the story of how he got it.

"When Fermin Keyes arrived at San Pedro, Louis Etinge had again flown. After two days of inquiring, Keyes at last discovered that his quarry had taken a train to San Diego.

"Down went the amateur to San Diego, only to find that his man had again disappeared. Two days more of hunting, and he finally found that the murderer had shipped for San Francisco.

"Then Keyes, on a train, began a race with the steamer that was carrying his man.

Which one of them would get to San Francisco first?

"Keyes's train pulled into San Francisco. In a cab he sped down to the wharf, only to find that the steamer from San Diego had arrived four hours before. His man was engulfed in the human maelstrom of the city.

"But, as I told you, Keyes was a born sleuth. He remembered that Etinge was a dry-goods clerk. Keyes began visiting one department store after another till—he found Louis Etinge behind a counter.

"Cain," said my friend, the railway mail-clerk, to his prisoner, 'why did you slay Abel?'

"I could plead insanity," was the answer. "I was really insane, you know. But what's the use? I'm a lunger. I'll be dead in six months. So—what's the dif?'"

A Smokeless Test.

"Smokeless engine! Humph!"

Thus exclaimed Fireman Ed O'Connor, as he climbed aboard the locomotive to which had been given the nickname "Old Ironsides."

"Sootless engine! Rot!"

Such was the remark made by Engineer Tom Garland, as he mounted to the cab of "Old Ironsides."

The engine in question had just come out of the roundhouse at the Stockyards' station of the Chicago Junction Railroad.

The two men in the cab ran Old Ironsides over to a siding and backed on two cars that were to be hauled as a train. These were the superintendent's inspection car in the rear and a glass-fronted coach next to the engine. This was an observation car from which a good view could be had of the smokeless, sootless locomotive.

Within the two cars were fifty guests of the railroad. Their host was Mr. Bristow, general attorney for the company. His fifty guests included three aldermen and forty-seven railroad men.

The two men in the cab were joined by the inventor of the smokeless, sootless contrivance.

The train had run a mile or so, when Fireman O'Connor suddenly sneezed. So did Engineer Garland. So did the inventor of the non-smoker.

Fireman O'Connor sneezed a second time, and then said:

"Tastes like smoke to me."

Engineer Garland coughed, choked, then gasped:

"Smells like soot to me."

The fifty men in the observation-car, all watching the smokeless engine, sneezed, coughed, choked, gagged, and wiped tears from their eyes and black soot from their faces. Alderman Stewart remarked:

"Thought I swallowed smoke. Must be mistaken. That's a smokeless engine."

The engine was belching not only volumes of the blackest, sootiest substance, but also flames. The train stopped with such a sudden jolt that the fifty guests were flung all over the car.

In the cab, Fireman O'Connor, finding his mustache on fire, beat the flames out with his hands. Engineer Garland scraped the flames



DOWN THE TRACKS THE FIFTY GUESTS PROCEEDED TILL THEY FOUND A STATION.

In the cab Fireman O'Connor cried:

"She's coming out in clouds—thickest smoke I've ever seen out of a stack."

After a look at his engineer and the inventor, he added:

"Gents, your faces are black with what looks like soot—but it can't be soot, 'cause this is a sootless engine!"

In the observation-car the company's representative, Mr. Bristow, was saying:

"Gentlemen, wait just a moment. It will be all right. It's unfortunate that this should happen, but I'm sure it's only some temporary trouble. We've been running this engine for six months without smoke or soot."

Just then one of the aldermen cried, "Fire!"

from his hair. The inventor tenderly felt his blistered face.

O'Connor cried, "We're on fire! Stop her, Garland!"

The fifty guests piled out and formed a bucket brigade.

The engine-curtain was blazing furiously. The brigade extinguished the flames. The coal in the forward part of the tender was cackling as if in a fire-box. The volunteer fire department threw water on the burning coal.

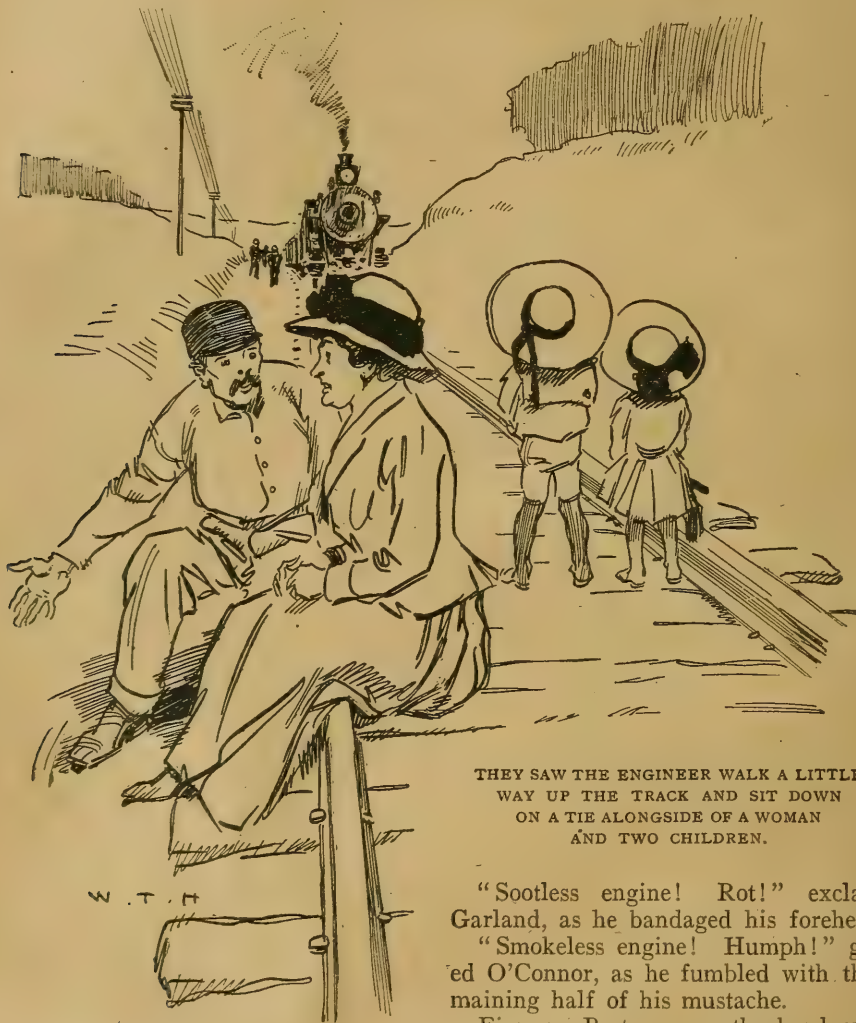
Then the inventor said:

"Gentlemen, you must not judge my smokeless engine by this test. My contrivance can be fitted to any locomotive, furnace, boiler, or stove. It has been tested success-

fully many times in the last six months. It is a genuine wonder!"

"He's right," put in Mr. Bristow, the general attorney for the railroad company. "All

They left Fireman O'Connor and Engineer Garland standing by the half-burned "Old Ironsides," applying wet handkerchiefs to their scorched faces.



THEY SAW THE ENGINEER WALK A LITTLE WAY UP THE TRACK AND SIT DOWN ON A TIE ALONGSIDE OF A WOMAN AND TWO CHILDREN.

that's the matter to-day is a defective flue that clogged the air-valves and threw the gases generated by fire into the cab and—"

"Say," interrupted one of the aldermen, "where's the nearest station at which we can get an engine that smokes and flings forth soot—just normal smoke and just every-day soot? We want it to take us back to town."

Down the track walked the fifty guests till they found a station.

They boarded a train hauled by an engine that was neither smokeless nor sootless. With them went the singed and blistered inventor and the coughing railroad attorney.

"Sootless engine! Rot!" exclaimed Garland, as he bandaged his forehead.

"Smokeless engine! Humph!" grunted O'Connor, as he fumbled with the remaining half of his mustache.

Fireman Bert was on the head end of the "hog train" with Engineer Kimball. As their train pulled across Illinois, between Quincy and Havana, the fireman said to the engineer:

"Kim, what were you spouting about last night at your Brotherhood meeting? Something about wanting to lay a matter before Governor Dineen—something about locomotive boilers?"

"Boiler inspection," replied Kimball.

The train was nearing Havana, and the engineer eased up so as to take the "hog train" in on a walk.

"Yes, boiler inspection," Kimball continued. "What I said was that we need State

inspection of locomotive boilers. There are Federal inspectors of steamship boilers, and there are city inspectors of boilers in cities. Why shouldn't there be State inspectors of locomotive boilers. We need 'em, I tell you. Wouldn't I like to get a private word with Governor Dineen on that subject."

"Have you ever seen the Governor?"

"No, but I'd know him from his picture, all right, if ever I should run across him. I bet I could convince him that it is his duty to start something in the legislative line that would lead to the appointment of State inspectors of boilers."

The "hog train" pulled into Havana and out again, and proceeded leisurely toward Pekin. Suddenly it halted.

Passengers thrust their heads out of the windows to see what caused the stop.

The engineer jumped off his cab, walked up track, and sat down on a tie alongside of a woman and two children.

Passengers then filed out of the coaches and went forward and met Fireman Bert.

"What we stopping for?"

"Family discussion," replied the fireman.

"Whose family?"

"The engineer's. That's his wife and kids he's talkin' to."

"Land sakes! What's his family doing here?"

"His wife is going shopping and needs some money. She signaled to him to stop."

"Hi, there, engineer!" called one of the passengers. "Get a skate on!"

"Just a moment," Kimball called back.

Expectant silence reigned a moment among the impatient passengers, during which they heard Mrs. Kimball say:

"Well, shall I paper the kitchen or white-wash it?"

A passenger, braver than his fellows, said to Kimball:

"Engineer, you should have some consideration for others, sir."

"Exactly what I'm doing," replied Kimball. "I'm having consideration for my wife."

The important-looking man received this rebuke with a smile, then strolled back to the coaches.

At the same time one of the passengers said something in a low tone to Fireman Bert.

"You don't say!" exclaimed the fireman. He, too, smiled.

After deciding that it would be cheaper to whitewash the kitchen, Engineer Kimball rose, and the "hog train" proceeded.

When the train pulled into Pekin, the important-looking man came to the engine and reached up his hand to the engineer, saying:

"Let us shake hands, mister. I thank you for carrying me safely and," with a broad smile, "as expeditiously as your family matters would permit. Good luck to you!"

"Same to you, old man," replied Engineer Kimball, taking the proffered hand. "Be good to yourself," he added, "and remember that in considering the welfare of others, a man should think of his wife first."

When the important-looking man walked away, Kimball saw his fireman shaking with laughter, holding a wad of waste over his mouth to muffle his chuckling.

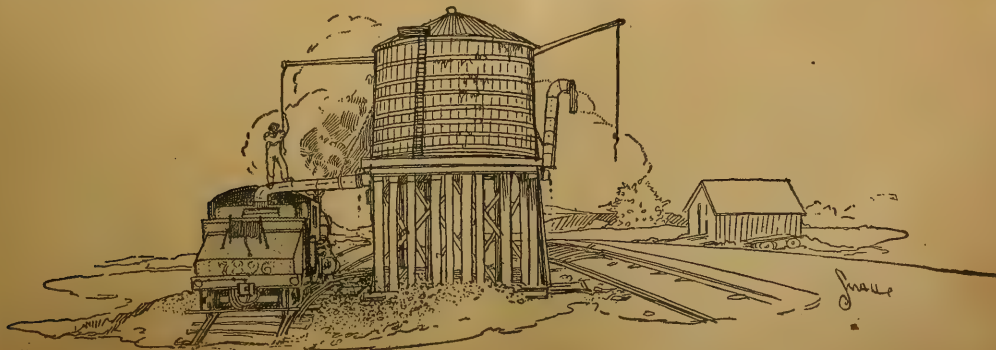
"What you snickerin' about?" asked Kimball. "And, say, what did that duffer shake hands with me for? He's a queer dub."

"You wanted a chance for a private word with the Governor of Illinois, didn't you, Kim?" asked Fireman Bert.

"Sure."

"Well, you've had two of the bulliest chances for a private word with him that you'll ever get. That hand-shaker was Governor Dineen."

Engineer Kimball collapsed on his seat and kept from fainting only by fanning himself vigorously with his cap.





SILENT JIM.

BY LESLIE CURTIS.

Written for "The Railroad Man's Magazine."

SO you're a brand-new fireman, and you're lookin' for Silent Jim? You're green all right, for every man on this trunk line knows him. Transferred from the Lackawanna? Well, I don't envy you none, If you're goin' to fire for Silent Jim—it's a mighty lonesome run.

Jim's due here any minute now. Set down and take a quid. I've half a notion to put you wise. You ain't much more'n a kid. Don't chew? Well, roll a cigarette, there's makin's in the pouch, But don't get sore at Silent Jim. It isn't a case of grouch.

It's purty nigh eighteen years ago—he was only a fireman then, Every one called him Sunny Jim, he was popular with the men. Always happy and smilin', and, say, but he married a prize! Purty and cute—a pippin—with regular pansy eyes.

One day he came to the roundhouse, handin' out sheepish grins. We couldn't savvy the reason, till he told us that it was twins! So the boys went up to the house that night to look at the little things, Most every one of us loaded down with rattles and teethin'-rings.

While we was standin' around the room, laughin' and kiddin' Jim, His wife jest opened them pansy eyes, and held out her arms to him. We fied out sort of embarrassed like, and nothin' much was said— But, next day, down at the roundhouse, we heard that the wife was dead.

Well, Jim came back to the run again, lookin' as white as chalk. We shook his hand, and it meant a lot, we hadn't the nerve to talk. He sent the twins to his folks down South, or so the women heard, For since that day, he's been Silent Jim—never speakin' a word.

Just notice, sometime, about three miles out, a graveyard on a hill; If you've got sand to look around, there's tears on the window-sill, And always that awful silence; well, I don't envy you none— Here comes Jim now! Luck to you, kid! It's a mighty lonesome run!



THE A. P. CIRCUIT.

BY GEORGE GILBERT.

Old Pop Murphy Tells of the Time When He Saved the Honor of the Service.



FEW lights were burning in the big main room of the Eastern United Telegraph Company's office, and few brazen tongues clicked between brazen lips of sounders. The Wheatstone circuits were still; the local and way wires were all deserted.

Here and there a through wire sputtered, but the bonus men on the Boston "quad" still kept up their "message - a - minute" average under the stimulus of increased earnings. At the big switchboard an incandescent gleamed occasionally to lure the night chief on to test for the "swing" that had bothered a suburban wire during the rush hours of the evening, while over in the east corner of the repeater gallery old Pop Murphy, spare of frame, keen of eye, bald of head, with scanty, bristling mustache quivering with the nervous tension under which he was laboring, tended the "peters" of the A. P. circuit.

From helix-screw to armature adjustment his hand wandered, while he anxiously watched the flickering sparks as they glimmered between the platinum of "the points." Down across the Jersey meadows a fog hung heavy, and the conditions were ideal for the formation of weather crosses, making the current vary with each change in the variant winds.

Because the insurgents had chased the regulars in Washington that day the A. P. Washington report was heavy and important, and must be coaxed through from south to north, from coast to coast, that newspaper readers might learn of the latest rifle in mercerized insurrection in the halls of Congress.

When the company had an emergency of that sort, when all other repeater men failed in the nicety of their adjustments, Old Pop—who had handled the first set of repeaters

ever made; who knew all there was to know of practise and theory in that line; when to jam the armatures close to the magnets; when to tighten the armature springs and when to throw in or out extra battery on either side—was invaluable.

Because he could cajole a President's message out of the fog or sneak the dots and dashes of a string of difficult cipher messages past the interference of an aurora, his grip-stricken arm was no longer called upon to do the arduous work of transmitting. He enjoyed a pensioner's status with the company.

As I listened to the rhythmic swing of the beautifully coded Morse fleeting west to Chicago and the coast and east to Boston and the New England States, I caught, as it were, an undertone of dots and dashes—thin, clear, and ghost-like in their quality.

A Buffalo wire was connected with the instruments on the table back of me. The sounder was silent, but from the table itself the weird tapping came; but its weirdness was not new to me.

Somewhere in the maze of wires to the West this wire was near another, and across the gap leaped the mystic waves which telegraphers call "induction," causing one wire to vibrate with the impulses carried by another, as one tuning-fork responds to the harmonics of its neighbor. Leaning my head on the table from whence the induction came, I heard:

A342CH WR 34 Paid.
UNION STOCK YARDS, CHICAGO, ILL.
ARMENT & Co., PORTLAND, ME.:
Matacos linygrium, Car 3445—

Then the induction faded. I had heard a portion of the Chicago beef-ciphers as they came swinging out of the West to the car-icing stations.

"Murphy," I asked, "what is induction?"

"Tis the forerunner of the wireless," said the veteran.

"Tis waves of some sort that separate themselves from the wire they belong to and mix in on another wire, where they have no business to be."

"Listen to the swing of that fellow's stuff in Washington," he said. "By the fairy-ring of Kilroe, his arm could pound Morse through a wire that reached to the planet Mars. 'Tis not so fast, but clear and plain, and he does not overrun his copy. He makes less noise than some, but he gets the copy over the wire."

"He would not get much over the wire tonight," I said, "without your hand to ease it over the peter-points."

"Let be, let be," said the old man, though he was pleased with the compliment.

Again the induction murmured its elfin undertone. Murphy cocked an ear toward the table from which it came.

"I mind once when induction saved a man from disgrace and a woman from suicide," he said.

I waited patiently for the tale.

"Heard ye ever of Billy Hubson, once champion snyder of the world?"

I had; who had not?

"He had a peculiar way of gripping his key," said Murphy. "Not with a full grip, but with a loose wrist and wide-open points. Two fingers on the inner edge of the key-knob, and his thumb clear. His dots were like Wheatstone, and his dashes just enough longer than the dots to make his Morse a marvel of sweetness to the ear. It was easier to take him forty words a minute than any other man at thirty.

"Once you heard his stuff going over the wire, you could always recognize it, exactly as you could a friend's voice over the telephone. It sounded fine and manly, like himself."

"N. Y., N. Y., N. Y., Q. D., Q. D.," called Washington.

"I, I, Q. D.," answered Old Pop, his grip-stricken wrist wabbling like a hen's foot as he answered the New York peter-call, known the world over to all sons of Morse.

"West says I'm coming heavy," said Washington.

For a moment Murphy was busy with his adjustments, and then the A. P. report went joyfully on again.

"I'll not describe Hubson to you," said the veteran. "Because it's only his style of

brass-pounding that figures in this story of mine.

"About the time Hubson won his gold medal for sending fifty-two words a minute, uncoded, in the big tournament, a nice-looking little chap blew into 195 one day and struck the chief for a job. He had come from a way-railroad station up in Connecticut, and his name was James Cargan.

"Now, Cargan was a sprig of a man, with a smooth, round, peachy face, dainty hands, a wisp of a mustache, and pale-blue eyes. Something in the droop of his under lip was not favorable; but he had a ready tongue and a nice easy way, and before long he was off the carpet before the chief and onto a wire.

"First off, they put him on a way-wire near my table, as they have many a youngster, that I might note the quality of his copy and sending. Typewriters were just coming into fashion then, but Cargan needed none. He wrote like a whirlwind, and every word looked as if it came out of a copy-book.

"He'll do," said I to McKenna, the traffic chief. 'He will be fit for the Oil City duplex in a month.' So he got the job.

"When I went back to my table, there was a man standing behind Cargan, listening to his wire. Soon this man beckoned across the room to another fellow, and he came across. The second man was Ned Wilson, a watery-eyed, spindle-shanked, wizened-up Scot, who worked in pool-rooms and brokers' offices when he could, and in commercial offices when he had to. Just now he had to do the latter, because he had lost a good pool-room job through drink. The two men stood back of Cargan a while.

"Watch his grip," said the first man, a stranger to me.

"Wilson looked at Cargan and listened.

"He has the Hubson grip," said Wilson.

"I noticed it. The lad had his key held as Hubson held his, and his sending sounded enough like Hubson's to be the same.

"The stranger turned around and saw me. He looked me in the eye a moment, and then looked away. A man who cannot look another in the eye steadily is thinking bad thoughts. The stranger had black hair, dark eyes, and a beard that made his face look blue where the close-shaven hairs pricked through. He was big and burly.

"Who's your friend?" I asked Wilson.

"Ben Mahone," said the Scot; 'just in from Frisco, looking for a sit.'

"Pleased to see you," I said, lying as I said it, for he was a far-down, if ever a

man was, and small use have high-up Irishmen for the far-downs.

"They went out, and I took notice of Cargan. There he was, not minding anything in the world but his wire, and happy to have a job in the big 195 office. And, sure as I am alive, he was sending like Hubson.

"Out of a million telegraphers, no two have the same swing to their Morse; but he was the millionth and one. In all my experience I never heard the like of it. He had the speed, the accurate touch, the judgment. Only one thing did I notice different, and that was when he sent the word 'the.' He jambed it a bit on the front of the following word, whatever it was, a thing Hubson never did."

"W. B., W. B., bk, bk, bk," called Chicago on the west wire. Murphy leaned over the west repeater lovingly, and Chicago Morsed a complaint to him. "Washington too light," he said.

"I, I," said Murphy, and then he straightened out the "bug."

"To resume," said Pop. "Cargan soon fitted himself into the office like a piece of apparatus. He was early to work and eager to 'wolf' the extra time. He was making money and friends, and soon the girls on the city wires and short circuits, where women do best, had their eyes on him.

"Best of all, was he known to Agnes Danaher, a pretty slip of a Jersey girl, who worked the cotton local. She was a sweet creature with a rosebud mouth, blue eyes, deep brown hair, and dainty.

"Unto her Cargan clung so earnestly that the other girls teased her about him.

"One afternoon, as I was balancing up the Philadelphia quad for the chief of the south board, who should come sidling up to me but Agnes Danaher. Her lips were quivering and her eyes were ready to brim over.

"Pop," she says, 'when you see me go for the elevator to-night, come after me and talk to me in the hall.' Before I could turn, she was gone, but soon across the room I caught the clacking of her sounder. It had an agate sound that made it easy to pick out of the roar of a thousand hammerings in all parts of the room.

"I had her words in mind all afternoon, and when I saw her go out I made bold to impose on my chief's good nature and followed her, although I was not through my trick!

"In a corner of the hall I found her, 'What is it, Agnes?' I coaxed.

"'Tis about Ned Wilson," she said, 'I

am afraid of him and Ben Mahone, that's come from Frisco.'

"What have they said to you?' I asked, hot with rage to think of them even speaking to a decent girl.

"Nothing," said she, 'but they are after Mr. Cargan every little while, and I saw them whispering to him on the corner last night when I came out. He was to take me home, and he turned away from me as if he were ashamed and let me go home alone.'

"I will look into this,' I said, 'I like it no better than you do.'

"McKenna," said I, to the traffic chief next day, 'where is that Ben Mahone from Frisco, who wanted the job here not long ago.'

"He's over in Hoboken," said the chief. 'They were short of men over there and I sent him over.'

"I like him not," says I.

"No more do I," says McKenna, 'but he serves to work a wire.'

"I cast my eye for Wilson, and there he was over in the far corner, where the Jersey wires came in. I edged near him and heard him call Hoboken.

"Is that you, Ben,' he asked.

"I, I," said Hoboken.

"Thinks I to myself, thinks I, I'll hear what you two say, but Wilson muffled his sounder with his hand and began to send. When it came Hoboken's turn, Wilson kept the sounder still but let the relay armature tip play against his thumb's edge and so got the Morse silent and sure, reading it by touch and not sound—a trick not many can do.

"Time for me to play tricks, too," said I, thinking to save Agnes Danaher's beau from I knew not what. It was before Hugh Grant chopped the poles off all the streets and put the wires under ground, and the roof was a mass of wires and cables. Going to the switchboard, I grabbed a box relay set and edged quietly out into the hall and climbed to the roof.

"On the roof was Casey, the trouble chaser. 'Your diagram of the Jersey grapevine circuits?' says I. 'The chief wants me to make a few tests here.'

"Out came his diagram, open went the cable box and soon I had my set clicking away on 203 Jersey.

"Cargan promised me this morning," wired Wilson, in his jerky, slovenly fashion, like peas rattling in a pan, 'that he would work it to-morrow.'

"O. K.," came back from Mahone over in Hoboken. They stopped and began sending

the Eastern Union's own business, as they should have been all along.

"What did Cargan promise him?" I said out loud.

"How do I know," said Casey, looking on me as one daft.

"Tim Casey," said I, 'you have a brass head and a pea for a heart—and mind your own business.'

"You're daft, man," said Casey, throwing his pliers at me, just as I went through the scuttle hole of the roof.

"We had heavy work that night. The newspaper wires were full of advance stories of the big Guttenberg race that was to be run next day. The Lexow investigation had driven most of the pool-rooms out of New York, but those that were left were making big money and all over the country.

"The tip was out that Candelabrum was to win the race and his closing odds were 1 to 5 and then 'out' altogether. The closing of the pool-rooms in New York had advertised the racing game all over the country, because the newspapers had been carrying pool-rooms in the head-lines for weeks, and that made thousands of people who otherwise never would have thought of a bet on a race otherwise. I watched the repeaters in my division that night. I planned to put down some of my over-time money, so I looked over the odds.

"Candelabrum at 1 to 3 I saw, and I remember now no other horse in the Guttenberg Plate that year save Yellow Tail. He was at the tail of the list and he stood 100 to 1.

"To think my ten dollars might be a thousand if I bet on him and he won, and the pool-room didn't bust before I got the money! But I had better sense than to play those long shots.

"While I was sitting there, away from everybody, the wires got quiet, as they will at times, even in the midst of a busy day. Now, late at night, the lull came with a queer suddenness.

I was wondering what was wrong, when I heard an induction on the very table where I sat, to which a Buffalo wire was connected. It was an old Erie wire, over the Old Reliable clear across the State—a rusty, old iron string no one would use now, when copper is none too good. A bad reputation old 31 Erie had for 'bugs' and weather crosses of all sorts. I bent my head to the table to see what the old witch was yammering about and what waves she was stealing from her betters, when I heard this message:

HOBOKEN, June 13.

JAMES SWITZER, HOTEL WEATHERBEE, WILKES-BARRE, PENNSYLVANIA:

Put all on the Plate. Everything fixed. Get away as soon as you get official.

N. E. O. MABHEN.

"Then came another to a Buffalo address and one to Chicago, and all in the same words and all signed the same. Idly I wrote that queer signature on a message blank and studied it. As I did so the induction stopped and the old Erie 31 was unbewitched."

The A. P. circuit's speed increased. As he saw "30" in sight the operator at Washington settled to his work. His Morse sounded clear and sweet in an increasingly staccato crescendo.

Murphy listened appreciatively. "There's music," he said. "If I had time I could demonstrate to you that the Continental code is hog latin and the Morse code the language of the angels above." He mused awhile before taking the thread of his tale:

"All next day I kept wondering about the odd signature to those messages that went out of Hoboken when I got that induction cross.

"It kept bothering my head all morning and, in the afternoon, as I set up the 'peters' for the race wires, I kept thinking of it. When we got the Guttenberg wire going, she began to snap like wildfire and, in a second, I threw open the key and asked:

"Hubson, how did you come to get down there to-day?' for it was Hubson, the world's champion sender.

"Hallo, Murph,' he answered. 'I just blew in from the south, and McKenna sent me here to handle the Guttenberg stuff.'

"'73,' says I:

"Soon I got a call to the switchboard, and there Chief McKenna warned me:

"Murphy,' says he, 'we have it from our secret service that the Big Butch gang of wire tappers will try to pull off something big on the Guttenberg Plate race to-day. A lot of advance money is said to be on Yellow Tail in the early pool-room books, and he has no show to win.

"I sent Hubson a message at Jacksonville five days ago to come up to send the Guttenberg stuff to-day, and we have good men at relay points, who know each other's sending and whom we can trust.

"If anything goes wrong, it will go wrong between this office and 'The Gut' track. You know Hubson's stuff over the wire, and for the honor of the service I ask you to be watchful to-day.'

I gave my promise and I kept it, but

not in the way he meant. But then I did not know that I would create an evasion to save two souls from ruin.

"Back to the Guttenberg wire. I went, anxious as a hen for her chickens to hatch. Hubson was sending the preliminary race gossip—the 'guff' we call it. After he had sent a few items and the betting odds at that time, half an hour before the races began, the wire stopped for, perhaps, half a minute.

"I noticed that was queer, then listened.

"The track is fast," began the next item of guff. The way that 'the' was hooked on to the following word caught my ear. Quick as a flash things pieced themselves together in my mind. I looked over to the Oil City wire, where Cargan should be and he was gone. I looked over in the corner where Wilson should be and he was gone.

"I remembered that signature on the induction messages I had heard from Hoboken the night before, and I wrote it out again, 'N. E. O. Mahben!'

"It was 'Ben Mahone' in cipher! I knew nothing would go wrong before the races began, so I went over to the Hoboken main wire and asked if Mahone was in the office. He was not.

"Then I went back and sat down again. It was clear to me. Cargan had been picked by the gang of wire tappers to send the race news that day from a wire-tapper's station between New York and 'The Gut.'

"It was the old game. The wire was to be 'grounded' at the wire-tappers' station; Hubson was to keep sending; what he sent would be repeated word for word until it came time to send the winner and official confirmation of the race they had planned to make their killing on, and then the name of a fake winner would be substituted and the rest of the races sent O.K.

"The pool-rooms all over the country would pay off, and the gang's cappers in half a hundred cities would make a huge killing and then fade away. If Hubson asked the receivers in the race-news section a question, or they had anything to send him, the tappers would throw a switch and he would get it.

"The wire-tappers had a copy of the message ordering Hubson from Jacksonville to Guttenberg. They knew that he would not sell out for love or money, but they had planned to stall him by putting Cargan, his wire double, at the key of that 'tap-plant.'

"No sooner had I arranged this in my head than I heard a sigh behind me. I turned, and there was Agnes Danaher. She was listening to 'The Gut' wire.

"I saw in the flash that she knew all about it. 'Agnes,' said I, 'come here. Now, tell me what is really on your mind.'

"We were alone behind a big pillar at the far end of the room. No one was noticing us.

"That is James Cargan," she said, pointing to the instruments that were clicking out his shame. 'He told me all about it last night, and swore me to secrecy,' she said in broken whispers. 'He stands to gain one thousand dollars for this day's work.'

"And why didn't a decent girl like you tell some one?' I asked angrily.

"She turned red and then white. 'He is too much to me,' she said.

"Too much or too little," said I, 'you should expose a skinner like that.'

"Oh, pop," she cried, 'I love James Cargan, and I cannot have him go to prison. Don't tell any one—I want to marry him.'

"Go back to your wire, and work with what nerve you have left," said I, 'and if this man can be saved, I'll do it, not for him, but for you.'

"She went, and I began to cudgel my brains. Here I was, with the honor of the service in my hands, Agnes Danaher's secret in my keeping, and the ears of the keenest men in the service on me. But none of them had ever noticed that Cargan jammed his 'thes' onto the following word when he sent. Not much did he jam it, but enough for me to know. He could fool ten thousand operators, but not me.

"I listened to his stuff. I knew that Hubson's sending was being relayed in some cellar or garret or sewer-hole between 195 and 'The Gut,' and was being passed through tainted hands to the outer world that was betting its good money on Candela-brum, while a cheap skate would win.

"Then I formed my plan. I chuckled inside to think of how easy it would be to save the foolish young man, and at the same time hurt the wire-tappers in the sorest spot—the pocket-nerve.

"In my pocket I chanced to have a bit of small, flexible wire. This I attached to the 'binding post' of the relay on the Jersey side of the race 'peters.' I let the other end dangle right over the 'ground' wire 'binding post,' and then I was ready to split the wire myself whenever I wanted to, without throwing the 'ground' switch. If McKenna came—a snatch, and the wire would go crumpled inside my pocket.

"So I waited. The Plate race was the third. The first and second went all right, for I knew that the gang would not try to

work their game on but one race—wire-tappers never do.

"After the second race 'The Gut' wire lay idle, after the post odds, and the corrected list of jockeys and weights were sent.

"They're at the post," signaled Cargan, repeating the flash he had stolen from Hubson.

"Then I put the 'ground' on, and held it. That put the wire 'dead' on the other side of the 'peters,' but I could hear on the Jersey side every word that Cargan said. I had tapped the wire to save one wire-tapper and break, financially, the rest. Soon Cargan clicked, 'They're off at "The Gut,"' but it never got to the wires of the racing section. He began the description of the race.

"Candelabrum first; Yellow Tail second."

"I saw McKenna start away from the switchboard. He came part way and shouted: 'Anything wrong on "The Gut" wire?'

"I held my nerve well for Agnes Danaher's sake and for the honor of the service.

"No, sir," I said; 'probably they are long in getting away.'

"I felt like a whipped cur for lying.

"I turned to Cargan's side of the wire, while the race-section side lay dead.

"They are in the stretch," he signaled. 'Yellow Tail leads by a head—by half a length; with Candelabrum second, and Jim Daly third—dot—dot—long dash; *Yellow Tail wins by a scant length!*' he flashed into my dumb, grounded wire.

"I laughed to think of it. He gave the time, and, in two seconds more, the official confirmation. Then my finger went to the armature spring on 'The Gut' side of the wire, and I felt it flutter. That meant that Cargan had taken the wire-tappers' instruments off, and that once again I had a straight wire to Guttenberg, with the real Hubson at the end.

"The fool thought the gang had made its killing, and he was dusting out of the tappers' crib to save his hide. I had just time to snatch the 'ground' wire and crumple it into my pocket, when Chief McKenna came booming toward me down the side aisle of tables. Just as he got to me Hubson began the 'guff' for the fourth race. As McKenna heard it he gave a roar.

"Where is the third race?" he signaled.

"Didn't you get it?" asked Hubson.

"Not a tick," said McKenna.

"There was some trouble on the Jersey side a minute ago," I said, 'but it did not seem serious.'

"I had never failed McKenna, and he never doubted me. 'Must have been a swing

to a ground,' he said. 'Anyway, no harm has been done—no one has tried to 'slip over a wrong story of the race.' Then, to Hubson: 'We did not get the third race. Quick—flash it.'

"How mad Hubson was! The way he ripped that story out was a caution to hear, and when the sporting world did get it Candelabrum was the winner and Yellow Tail was left at the post.

"Half a million dollars was paid out in pool-rooms in all parts of the country in a jiffy. It all went to those who had really won it, and not to those who had beguiled Cargan to treachery."

"The A. P. wire was fairly humming now. 'Last sheet,' the wire pulsed to the east and west, where a hundred presses waited for "30" before they began to roar forth the avalanche of another day's history.

"And then?" I queried.

"Well, that night Agnes and I called at James Cargan's room, and found him panic-stricken. His conscience was gripping him hard. He knew something had gone wrong, and the wire-tappers had sent him word that they would have his life because he had thrown them down.

"Agnes Danaher scorched him with her tongue, and he broke down and told me all about it. For Agnes's sake I held my peace."

The veteran paused. He seemed dreaming.

"I could take you to James Cargan's home to-morrow," he said, "and introduce you to Mrs. Agnes Cargan and all the little Cargans, but I will not. Cargan's not his name, anyway. Maybe I have not told you the truth; maybe this is only an idle tale to while away the hours till '30' comes; maybe my brain is bewitched with induction. It is sufficient to say that Agnes Danaher and I made a man of him—"

"30!" sang the A. P. wire.

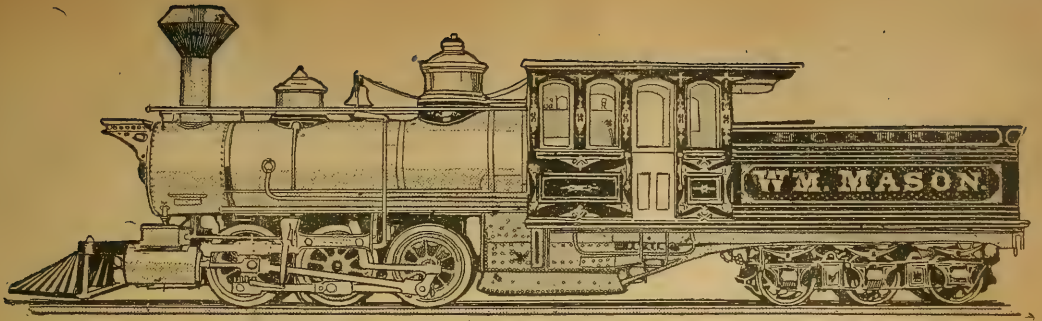
"Fifty-two books is the count to-night," signaled Chicago.

"O.K. 30, all, east and west!" signaled Washington.

"30!" said I to old Pop Murphy.

"And '73' to you, and the top of the morning," cheerily answered the veteran as he threw the switches that cut the copper nerves between north, east, west, and south.

"N. E. W. S." are the initials of the cardinal points, and the messages from all four make the *news* of the day; and "30" ends each day's story just as another is ready to be pulsed wherever the wires reach. And "73"? Why, that is Morse for "best regards." So, "30" and "73."



LOCOMOTIVE "WM. MASON," BUILT IN 1847, ONE OF THE FIRST LOCOMOTIVES IN AMERICA TO BE EQUIPPED WITH THE WALSCHAERT VALVE-GEAR.

The Walschaert Valve-Gear.

BY ROBERT H. ROGERS.

WHILE locomotives have been growing larger and more powerful year by year, necessitating heavier parts and stronger construction, one factor that has not changed in the slightest degree since the adoption of the standard gage is the length of an engine's driving axles. Four eccentrics, crowded closely together between the frames where they are almost inaccessible to the engineer and difficult to keep properly lubricated, soon set engine-builders to looking about for a better mechanism to open and close the steam-ports. It was not until they experimented with the invention of a Belgian shop superintendent that they discovered the solution for which they were looking.

The Walschaert valve-gear has been tried, with the greatest success, on all the heavier types of passenger and freight locomotives both in this country and Europe. It is rapidly displacing its predecessor—the Stephenson link motion—on account of its smoothness of action and the ease with which it may be repaired.

Mr. Rogers, whose experience as a master mechanic has rendered him an excellent judge of the merits of this up-to-date mechanism, has given us a thorough explanation of all its details, with some hints for use in cases of breakdown.

The Operation, Construction and Maintenance of Egide Walschaert's Remarkable Invention, Showing Its Many Points of Superiority Over the Old-Time Stephenson Link Motion.



CURIOSLY enough, locomotive development appears to mature in grand cycles, instead of embodying a steady and unflinching progress which might logically be expected to follow the conception of a machine which stands unique in that it received immediate recognition as the one great solution of land-transportation.

Students of locomotive lore are well acquainted with the fact that many of its most prized details to-day had their beginnings years ago, and that between them and the present a period of nearly half a century ensued during which they fell either into disrepute or were forgotten. Familiar illustrations are the bushed-side rods, the brass end-play liner on driving-boxes, and the now

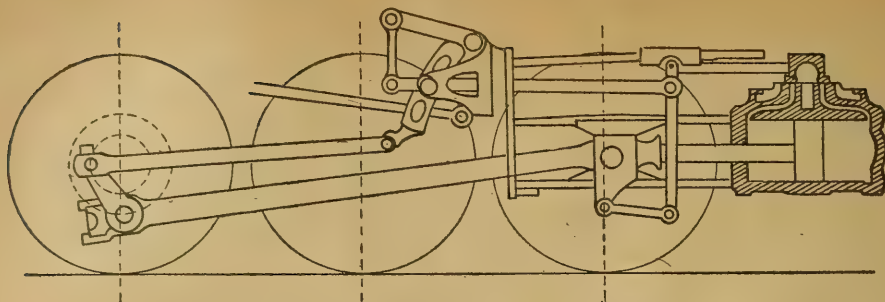


FIG. 2.—THE WALSCHAERT VALVE-GEAR.

This motion particularly appeals through the presence of a relatively small number of parts, and because all of these parts are on the *outside* of the locomotive, whereas in the Stephenson link motion the parts are all underneath and between the frames. The Walschaert gear thus embodies undisputed points of superiority in ease of inspection and accessibility to repairs.

universal "sharpshooter," or straight smoke-stack.

Ross Winans, the famous Baltimore railroad man and engine builder, employed these latter devices on his "camel-back" locomotives in the early days of the Baltimore and Ohio Railroad. All of them and many more dropped out of sight, only to return again unto their own, and in all probability they are with us now, to stay until steam traction is supplanted forever by some other form of motive-power.

It is not so generally known, however,

that the now much exploited Walschaert valve-gear, undoubtedly the most practical solution of the slide-valve problem ever presented, is also one of these resurrected items from the now nearly forgotten days.

Startling as this novel design may appear in contrast to the time-honored Stephenson link motion, which served effectually until the century-mark had been nearly reached in its history, and notwithstanding the amazing rapidity which has characterized its introduction into American practise during the past half dozen years, the fact remains that

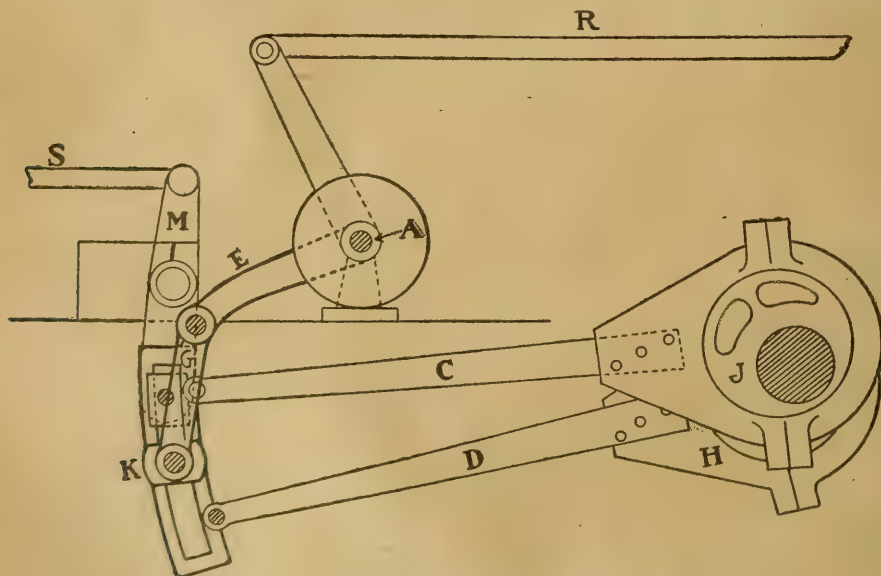


FIG. 1.—THE STEPHENSON LINK MOTION.

This is the general arrangement of the valve-gear which for nearly three-quarters of a century appealed to American practise as the most logical solution of the slide-valve problem. It will be noted that two eccentrics are required, one for either direction in which it is desired to run the locomotive, whereas in its successor, the Walschaert, illustrated above, but one eccentric is necessary, and that the entire motion is on the outside of the engine, instead of underneath it, as in the instance of this motion.

there is nothing new about it. On the contrary, it is quite ancient; older than the motion which it is fast supplanting, and indeed almost as old as the locomotive engine itself.

Stephenson bought the shifting-link valve-gear, which erroneously bears his name, from William Howe, the true inventor, one of his pattern-makers, of Newcastle, England, in 1843. Stephenson practically pirated this invention, inasmuch as he allowed Howe but twenty guineas for the idea, lock, stock, and barrel.

The latter failed to perceive the value of his ingenious model until after the sale had been consummated, and retired into obscurity, while Stephenson hastened its application to every locomotive subsequently turned out from his works, and so diffused the idea that it remained the standard, at least in American practise, until 1904.

In the meantime, and coincident with the experiments of Howe and Stephenson, the invention destined after sixty-six years to succeed their shifting-link motion was born in the state railway shops at Malines, Belgium, in 1842. It did not receive the spontaneous acclaim which heralded the valve-gear with which we have been most familiar, but that he who evolved it builded even better than he knew is well evinced by the tremendous popularity which it now enjoys.

Egide Walschaert, the inventor, was born in 1820 at Mechlin, then a little retired village in the vicinity of Brussels. The railway line from Brussels to Malines was opened in 1835, and that decided the career of young Walschaert, who entered the Malines railway shops in 1842.

Walschaert's Patent.

His wonderful aptitude for locomotive problems is illustrated in the fact that in two years he became chief superintendent of the shops of the Brussels Southern road, and at the early age of twenty-four had already acquired to an eminent degree all the qualities which go to make a successful engineer. These sterling qualifications should have secured to him the position of technical director of the system's locomotive service, but it is humiliating to state that he remained chief shop superintendent all the remaining active years of his life.

On October 5, 1844, M. Fischer, engineer of the state railways at Brussels, made an application in the name of Egide Walschaert for a patent of an invention relating to a new valve-gear for locomotives. This Bel-

gian patent was accorded by royal decree on November 30, 1844, for a term of fifteen years. The rules of the railway company did not allow foremen of shops to advertise a patent in Belgium to their benefit, and this explains perhaps the part played by M. Fischer, who, however, never laid any claim to the invention.

The mechanism described in the patent of 1844 presents a strong resemblance to that which has at present come into its long-delayed appreciation, and the inventor constructed in 1848 a similar valve motion for application to locomotive No. 98. At that time the valve-gear in use was that of Sharp, with two eccentrics and the usual forked rods.

Won Early Success in Europe.

As has been mentioned, the shifting link attributed to Stephenson had been invented by Howe in 1843, and it is therefore doubtful if Walschaert had ever seen it before his own patent was granted. He also invented a valve-gear for stationary engines, somewhat on the Corliss or Sulzer principle, and he built at Brussels a shop for the manufacture of these engines, which was managed by his son.

Although recognition of the splendid qualities of the Walschaert valve-gear has been tardy in this country, it must not be assumed that the inventor passed unhonored through his long and useful life. At the Paris Exposition of 1878, a gold medal was awarded him for his engine, and in 1883 the exposition at Antwerp awarded him a diploma of honor, in which his locomotive valve-gear was given merited praise.

Walschaert died on February 18, 1901, at St. Lilles, near Brussels, at the age of eighty-one years. His reputation, however great, was accepted with singular modesty, and his business relations were met with absolute disinterestedness.

He gave his remarkable invention to the world at a time when the study of steam distribution and valve-gears was in its infancy, and he was deprived of the resources of a science which was not yet developed. On account of his great merits it is unfortunate that proper justice has not always been accorded Walschaert, as the ingenious mechanism which was original with him has been purloined for long years in the greater part of Europe. He passed away just three years before the first valve-gear which bears his name made its advent into the United States.

Prior to 1904 the exclusive valve motion in this country, if not in the entire western hemisphere, was that of the Stephenson link. It had seemingly proved to be the survival of the fittest, well exemplified in the fact that it was embodied in upward of 40,000 locomotives.

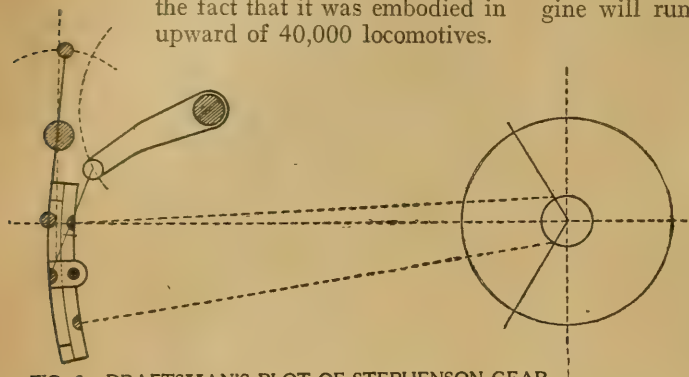


FIG. 3.—DRAFTSMAN'S PLOT OF STEPHENSON GEAR.

This diagram represents the scheme to scale for one side of an ordinary locomotive equipped with the Stephenson link motion. The motion of the latter is complex to a degree, and infinite care must be exercised in its laying out. Before the drawings are finally prepared for shop use they are usually proved on a full-sized model of all the parts.

It is assumed for the sake of this article, which is intended to be explanatory of the Walschaert gear, that the Stephenson link motion is understood by its readers. It may, however, be well to briefly define the problem which presents in the instance of any valve-gear, in order that the points of superiority attained by the Walschaert may be fully appreciated.

The Stephenson Link Motion.

Locomotives are propelled by the to-and-fro motion of the pistons in the cylinders, communicated to the driving-wheels through the medium of connecting parts, viz.: cross-heads and rods. To insure this to-and-fro, or reciprocating action of the pistons, the steam must be alternately admitted and discharged from either end of the cylinders.

This latter distribution is effected by a slide or piston-valve, which is the same for any style of valve-gear, and in which the point to be aimed at is to secure an ease of movement with the least multiplicity of parts. Every motion must necessarily embody the reversible as well as the forward feature, in order that the locomotive may be propelled in either direction at the will of the operator.

In the Stephenson link motion, the general arrangement of which for one side of the engine is shown in Figure 1, two eccentrics

are employed for each cylinder. One of these is fixed or keyed on the main driving axle or shaft in such a position as to move the valve so that the engine will run in one direction, and the other eccentric is set so that the engine will run the reverse way.

The ends of each pair of eccentric-rods, "C" and "D," are attached to what is called a link, "K," the object of which is to furnish the means of quickly engaging or disengaging either eccentric-rod to or from the rocker, "M." The rocker in turn is connected to the main valves through the medium of the valve-stem, "S."

It will be noted in the sketch that the link is suspended by a bar, "G," called the link-hanger, to the end of the lifting shaft-arm, "E." This shaft has an upright arm, to which is connected the reach-rod, "R," and this

in turn to the reverse lever in the cab.

In Figure 1 the Stephenson link motion is depicted in "full go-ahead" or forward gear; that is entirely under the influence of the go-ahead eccentric, which in this case is the eccentric marked "J." Should it be desired to reverse the position of the valve (not shown in the drawing) it is effected by pulling the reverse lever, and this, through the medium of the reach-rod and the pivoted point "A" of the lifting shaft, raises the link until actuated by the "back-up" eccentric, "H."

Where Walschaert's Gear Excels.

From this brief description it is apparent that two sets of the above apparatus are required on each locomotive, one for each side, any locomotive being necessarily two distinct engines, although the adjustment of the valve-gear is such that their action is harmonious. Consequently, the Stephenson link motion in entirety embodies four eccentrics, with their rods and straps, two links, two link-hangers, and a lifting shaft extending across the engine with two arms, one for each link.

This is the valve-gear which was solely in use in this country for sixty-seven years, and probably would have retained supremacy had not the tremendous strides of the last few years in increasing the size of locomotives

dictated its retirement in favor of the Walschaert.

It will be noted that the Stephenson link motion is entirely underneath the locomotive, between the two frames. This did not prove a serious objection while the parts remained light in weight and their size could be restricted to reasonable proportions.

In the modern locomotive, however, it became necessary to have them of such size that there is scarcely room enough for the four eccentrics on the same axle between the frames. They are crowded together so that it is practically impossible for the engineer to give them the lubrication and inspection which hard service demands. The Walschaert gear, however, being outside the engine in its entirety (see Fig. 2), is perfectly accessible, and can therefore be much more easily maintained.

The Stephenson link, under the influence of two eccentrics, moves through wide angles, resulting in a wedging action of the link-block, which strains the gear and produces lost motion. The Walschaert link, driven by a single eccentric, moves through smaller angles and produces less lost motion.

By removing the valve-gear from between the frames, as has been done in the instance of the Walschaert gear, a better opportunity is afforded to strengthen the frames through cross braces, which the regular link motion prohibits, and thus the possibility of frame breakages is reduced.

The Walschaert gear also shows a distinct advantage over the Stephenson link motion as regards permanence of adjustment. When a heavy freight-engine is half-way between shoppings the Stephenson link motion is slack and loose, while the Walschaert valve-gear is in practically as good condition as when it left the shop, there being no large eccentrics to keep lubricated, and its hardened pins and bushings are valuable adjuncts.

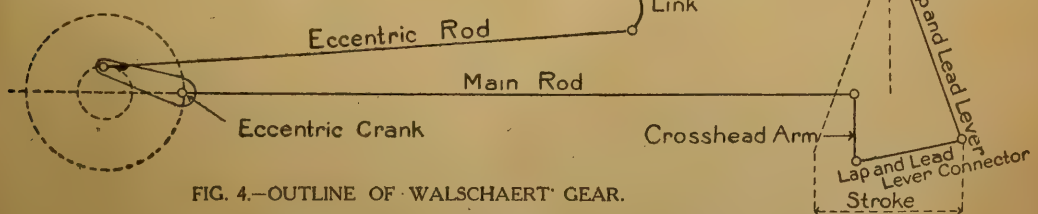


FIG. 4.—OUTLINE OF WALSCHAERT' GEAR.

The above represents a properly proportioned plot of this motion as arranged for inside admission-valves, and on it has been placed the names of the various parts as recommended by the American Railway Master Mechanics' Association. Starting at the crank-pin we have the eccentric-crank, eccentric-rod, link, reach-rod, lift shaft, radius rod-hanger, radius-rod, lap and lead connector, and crosshead-arm.

These are some of the reasons why a large number of American railroads are now equipping their engines with the Walschaert valve-gear. Seldom in the history of the development of the locomotive in this country has any improvement, once introduced, been so rapidly accepted as has this type of valve motion; and, inasmuch as its use will undoubtedly increase, a clear understanding of the elements at least of its construction and operation will be expected from those who operate and maintain engines so equipped.

Details of Construction.

In order that a clear understanding be attained of this mechanism, it is thought advisable to present the subject with the assistance of a few simple sketches, and in these all elaboration of detail has been omitted to prevent any possible confusion of the central idea. Some of the parts have been much exaggerated in comparative size for the sake of clearness; but fidelity has been strictly adhered to in the outline and proportion of the connecting parts, the combined action of which produces the motion desired.

Referring to Fig. 4, in which is illustrated the outline diagram of this motion, it will be noted that the Walschaert gear derives its motion from an eccentric-crank, or return crank, on the main crank-pin. The rod from this eccentric-crank is secured to one end of the link, which is pivoted in the center on a

pin held by a bracket bolted to the guide yoke. In the completed form these parts are also illustrated in Fig. 2, which represents the application of this gear to a consolidation engine.

The link-block is secured to the radius-arm, or bar, one end of which is attached to the end of the valve-rod, or stem, so-called, and the other end to the lifting arm of the reverse shaft. It will also be noted that the valve-rod is attached to a lever which derives its motion from the cross-head. This last detail determines the lap and the lead of the valve, and gives them a fixed value, whereas the Stephenson link motion gives a variable lap and lead, affected by the valve travel.

Gets Motion from Two Sources.

The motion imparted to the valve by the cross-head connection, however, is small, as the cross-head arm and the lap-and-lead connector are attached to the lower end of the lap-and-lead lever, while the radius-rod and valve-stem are connected close to the upper end, thus imparting only a slight motion to the valve-stem.

As the motion of all valve-gears is quite a complex study, it is extremely difficult to analyze the Walschaert from an elementary standpoint; but reference to the six diagrams, illustrated in Fig. 5, may serve to convey a fair idea of its motion. In this instance the valve is outside admission, and the motion is represented throughout as in full forward gear, or with the reverse lever in the extreme forward position.

As has been mentioned, the valve receives its motion from two distinct sources; first, from the eccentric-crank, which gives the long travel to the valve, and, second, from the cross-head by means of the lap-and-lead lever, which would give a short travel to the slide-valve, even were the eccentric-rod disconnected.

Starting with diagram one, Fig. 5, as the valve is outside admission, with the main pin on the back center, the eccentric-crank is on the top quarter, or a quarter of a revolution ahead of the pin, and the radius-rod is connected to the lap-and-lead lever below the valve-stem. The link is in its central position, and the valve would be in its central position on the seat if it were not for the motion given to it by the lap-and-lead lever.

As it is, however, the cross-head being at the back end of the stroke, the lower end of the lap-and-lead lever is at its extreme back

position; and the angle assumed by the lever has moved the valve forward, as indicated by the arrow, a distance equal to the lap of the valve plus the lead. The steam, therefore, enters the back steam-port to the piston, as indicated by the curved arrow, while the other end of the cylinder is open to the exhaust.

In diagram two the piston has moved forward a distance equal to about eighty-five per cent of the stroke, the valve has traveled to its extreme forward position and back again, as indicated by the arrow, until it has closed the back steam-port, while the front port is still open to the exhaust. In other words, the valve is at the point of cut-off.

In diagram three the piston has moved still nearer to the forward end of the stroke. The exhaust edge of the valve is now in line with the edge of the back steam-port, so that any further movement will open communication with this port and the exhaust. The front port, on the other hand, has been closed to the exhaust, and whatever steam is ahead of the piston will be compressed.

In diagram four the piston is at the extreme forward end of the stroke; the angle assumed by the lap-and-lead lever has moved the valve back a distance equal to the lap plus the lead; the front port is open for the admission of steam, and the back port is open to the exhaust.

Finest Adjustment Is Possible.

In diagram five the piston is moving toward the back end of the cylinder, and the valve has just closed the front port to the admission of steam, showing the cut-off position of the valve on the back stroke.

In diagram six the piston is very nearly at the end of the back stroke, and the valve is about to open the front port to the exhaust, while the back port is closed to the exhaust, and compression is taking place in the back end of the cylinder.

In these diagrams, which it is believed will give a clear idea of the changes assumed in the position of the connecting parts during one revolution of the driving-wheels, it is quite apparent that when the reverse lever is hooked up the link-block will be brought closer to the center of the link, and the motion imparted to the valve-stem by the radius-rod reduced proportionately. It is thus possible to work the valve with the equally fine adjustment of cut-off permissible with the Stephenson link motion.

Referring to the outline drawing, Fig. 4,

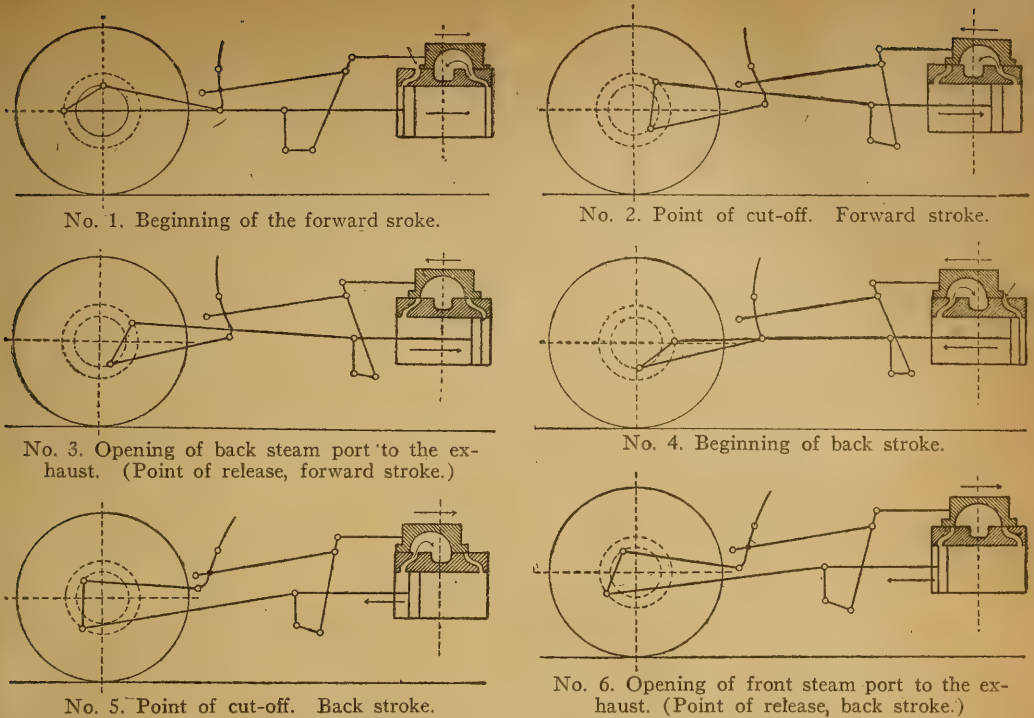


FIG. 5.—WALSCHAERT VALVE EVENTS IN ONE REVOLUTION.

This series of diagrams represents the different positions of the valve for different positions of the crank-pin during one complete revolution of the driving-wheels. For the sake of simplicity the valve and cylinder are shown in section, while the other points of the gear are represented by their center lines and center points only. As will be apparent, the diagrams are out of proportion, the valve and the eccentric throw having been enlarged in order to bring out more clearly the positions of the edges of the valve relative to the edges of the cylinder ports.

the radius-rod is shown in the center of the link, as it would be with the reverse lever in the center of the quadrant, hence the valve-stem can receive no motion from the eccentric-crank; but it will be noted that it is still influenced by the lap- and -lead lever; or cross-head connection, and the point of connection between the valve-stem and the lap-and-lead lever is selected to permit the motion of the former to equal the sum of the lap of the valve and the lead desired on either side of the center line.

Built to Stay Put.

To change the lead of the Walschaert valve-gear it is necessary to change either the lap of the valve, reducing it to increase the lead, and increasing it to reduce the lead, in which case the cut-offs will occur at later or earlier periods in the stroke respectively, or to change the lengths of the arms or distances between the connecting points of the lap-and-lead lever. Increasing the distance between the radius-rod connection and the valve-stem connection to the lap-and-lead

lever would increase the lead, while shortening this distance would decrease it.

The question frequently arises among machinists and apprentices, to whom this gear is yet unfamiliar, whether its parts are as susceptible to adjustment as the old familiar Stephenson link action; in other words, whether the valves can be set should occasion seem to require it. The general impression among the rank and file is that no adjustment is possible; but, while this is true, in the abstract, it does not imply that no correction can be made.

On the contrary, when intelligently approached it is possible to do many things toward straightening out faulty conditions, although it cannot be denied that the real valve-setter is the man who primarily lays the motion out on the drawing-board.

In the first place, the eccentric-crank, from which the link derives its motion, is supposed to be properly located and keyed to the crank-pin as a permanency. In fact, if the draftsman's work is properly done, there is little liability to inequality in the movement of the motion.

After a long study, combined with practical experience in connection with the Walschaert gear, the writer recommends the following compilation of rules, which he has often applied to advantage in making readjustments to this motion in roundhouses after the engine had been delivered by the builders, and presumably in a condition for the best results.

These instructions apply to piston-valve engines with inside admission, with combination lever fulcrum located above the valve-stem, and with the link-block below the center of the link when in the forward motion, this being the general arrangement of the motion on passenger engines at least.

How Adjustments Are Made.

Assuming all parts of the valve-gear to be correctly proportioned, it is possible to proceed as follows:

(1) With port lines marked on valve-stem, main-rod valve, and all parts of the valve-gear connected, excepting the link end of the eccentric-rod, adjust the link-block so that there will be no movement of the valve when the link is oscillated on its center. In case both valves do not remain stationary with one position of the reverse lever, adjustment must be made on the lifting device of either side until they do.

(2) With reverse lever in its central position, as found above, next connect the link end of the eccentric-rod and find both dead-centers of the engine, and with a tram mark the same on the wheel from any rigid point; also mark the extreme travel points on the guides at the same time, checking the port lines for equal lead and square lead by adjusting the valve-stem as per Case 1, following.

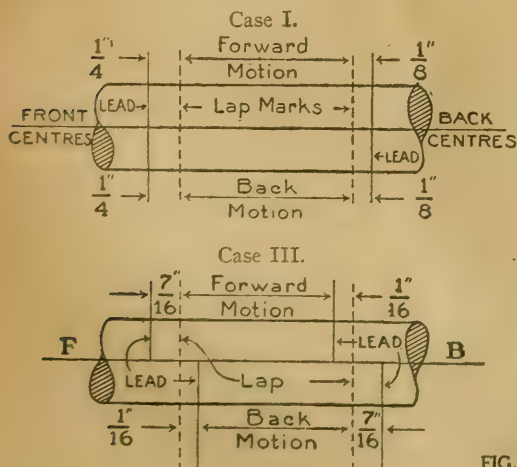


FIG. 7.

(3) With valves approximately set and ready to run over in order to get the different valve events,

place engine in the forward motion and catch the front and back centers, at the same time noting the positive of the port lines as in Case 1. Repeat this operation with engine in the backward motion. With position of port marks noted there may be readings similar to either of the four cases following. After adjustments are made the valves should be run over in their principal positions. Valves may be considered as practically correct when the cut-off and release events in the forward motion, at the usual running position (say twenty-five per cent cut-off) do not vary over one-thirty-second of an inch, though, of course, closer adjustment is desired if possible.

MORE RULES FOR ADJUSTMENTS.

(1) The eccentric-crank is correctly set when the sum of the leads in forward and back motion are equal. Thus, in Fig. 6, $A + B = C + D$.

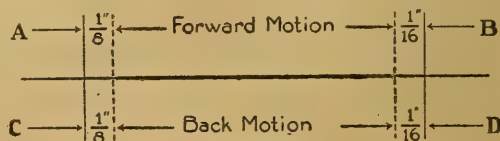


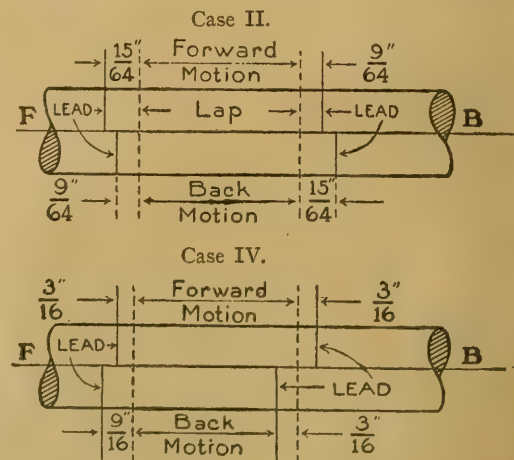
FIG. 6.

(2) Shortening the eccentric-rod increases the lead at points C and B, and decreases the lead at points A and D (Fig. 6), and *vice versa*. This may be done by means of liners in the strap end of the rod.

(3) Decreasing the throw of the eccentric-crank decreases the leads in forward motion, and increases the leads in backward motion, and *vice versa*.

FOUR CASES OF VALVE-PORT READINGS.

Case 1. When the two leads on the forward centers in both motions, and the two leads on the back centers in both motions are equal; but the forward center leads are not equal to the back center leads,



as shown in Fig. 7, they must all be made equal, as follows. Adjust the valve-stem an amount equal to

one-quarter the difference of the sums of the leads in both motions, thus:

$$\frac{\left(\frac{1}{4} + \frac{1}{4}\right) - \left(\frac{1}{8} + \frac{1}{8}\right)}{4} = \frac{1}{16} \text{ in.}$$

In this case the valve-stem should be adjusted 1-16-inch to the right. This shows, according to Rule 1, that the eccentric-rod is set correctly.

Case 2. When the leads come, as shown, that is, the forward motion lead on the front centers is equal to the back motion lead on the back centers and the forward motion lead on the back centers equal to the back motion lead on the front centers, they must all be made equal by shortening the eccentric-rod an amount equal to three-fourths the difference of the sums of the leads, thus:

$$3 \left| \frac{\left(\frac{15}{64} + \frac{15}{64}\right) - \left(\frac{9}{64} + \frac{9}{64}\right)}{4} \right| = \frac{9}{64} \text{ in.}$$

When this is done there will be equal leads in both motions.

Case 3. Here we have 1-16-inch negative and 7-16-inch positive lead in both motions. In this case the valve may be squared by shortening the eccentric-rod an amount equal to three-fourths the total sum of the positive and negative leads, thus:

$$\left(\frac{7}{16} + \frac{7}{16} + \frac{1}{16} + \frac{1}{16}\right) \frac{3}{4} = \frac{3}{4} \text{ in.}$$

If the leads came just the reverse of the above we would have to lengthen the eccentric-rod to equalize them.

Case 4. The figure shows 3-16-inch positive lead on both centers in the forward motion and 9-16-inch positive lead in the back motion on the front center, and 3-16-inch negative lead in the back motion on the back center. First move the valve-stem 3-16-inch toward the back center. The next step is to equalize the lead as in Case 2. This may be done by lengthening the eccentric-rod. See Rule 2.

Some Temporary Repairs.

In connection with the above instructions, it may be added in passing that it is best not to experiment with the Walschaert valve-gear until thorough familiarity has been attained with its mechanism. Properly speaking, the parts are non-adjustable, the above being offered merely for the interest it may have in illustrating what can be done.

Having considered the principles of the motion, the next phase of the subject, and that which will naturally be of the greatest interest to all engineers, is what may be done in case of a break-down. Although impossible to lay down rules to cover every case that might arise, some of the more usual failures

can be briefly reviewed and the best and quickest course indicated to follow in such cases.

Suppose, for instance, an eccentric-rod, eccentric-rod, or the foot of the link is broken; or one of the link trunnions twisted off, the other trunnion holding the link up in position.

In such cases take down the eccentric-rod, disconnect the back end of the radius-rod from the lift shaft-arm, and secure the link-block in the center of the link. With the motion disconnected and blocked in this way, the valve on the lame side receives a travel from the lap-and-lead lever equal to twice the amount of the lap plus the lead, which gives a port opening equal to the amount of the lead.

This permits leaving the main rod up on the disabled side and running in with both sides; as the cylinders can be lubricated, and, although the cut-off will be very short on the disabled side, the steam that is admitted will do a certain amount of work and the engine can be reversed.

Other Break-Down Remedies.

In accidents where it is necessary to block the valve to cover the ports, if the engine has no relief-valves in the cylinder-heads to remove, the best practise is to remove the main rod on the disabled side. In such instances as a broken main rod, bent piston-rod, or cylinder-head knocked out; if the valve has inside admission and there are no relief-valves, the engine may be disconnected and blocked as follows:

Disconnect the front of the radius-rod from the lap-and-lead lever and suspend it clear of the latter by means of a wire or chain from some convenient support. Secure the valve to cover the ports. This can usually be done by means of a set-screw provided in the valve-stem cross-head for this purpose; but, if there is no such set-screw, the valve-stem cross-head may be blocked. Take down the main rod and block the cross-head at the back end of the guides.

With the valve motion disconnected in this way, the reverse lever is free to operate the other side, and the engine can be run in on one side. If the cross-head arm, lap-and-lead lever connector, or lap-and-lead lever is broken, the engine might be blocked in the same way, except that, of course, such of the broken parts should be removed as would in any way interfere with the running of the engine.

If the valves have outside admission and there are no relief-valves in the cylinder-heads, in cases where it is necessary to secure the valve to cover the ports such as have been considered, it may be effected as follows: Disconnect the radius-rod from the lap-and-lead lever and take down the latter, as otherwise the front end of the radius-rod would strike the lever as the radius-rod moves back and forth to the motion of the link.

Suspend the front end of the radius-rod from the valve-stem cross-head guide, using for the purpose a wire or chain (the fire-door chain, if no other is at hand). Secure the valve to cover the ports, and take down the main rod and block the cross-head at the back end of the guides.

These are the more common break-downs with which an engineer may have to contend, and the above solutions by Mr. C. O. Rogers, of the American Locomotive Company, to whose paper the writer is indebted for some

of the material in this article, will necessarily be of assistance. After the principle of the motion has been grasped, any failure of the parts can be handled as readily as those of the Stephenson link motion.

The Walschaert valve-gear was first introduced into this country in 1904, being embodied in the first Mallet articulated compound ever employed in American railway practise, No. 2,400, built at the Schenectady works for the Baltimore and Ohio Railroad, and since that time forty per cent of the new engines turned out have been so equipped.

Since it may be applied to any type of engine without material change in the design or multiplication of the moving parts, there seems little doubt, in view of the other points of superiority which have been commented on, that in a short time it will become the standard locomotive valve motion in this country, as it is now the accepted type on the railroads of Europe.

UNIVERSITY GETS TESTING PLANT.

The Chicago Northwestern Turns Over to Illinois Students Its Equipment for Locomotive Testing.

UPON the recommendation of Mr. Robert Quayle, superintendent of motive power and machinery," says the *Railway and Engineering Review*, "the locomotive testing plant of the Chicago and Northwestern Railway has been presented to the University of Illinois.

"Under the immediate directions of Mr. H. T. Bentley, assistant-superintendent motive power and machinery, it has been taken from its foundation, the bearings and other running parts have been put in good order for service, and the plant, with all the special patterns used in its construction, has been loaded and shipped to the University of Illinois.

"It is understood that the plant will be held by the university pending the construction of its proposed transportation laboratory. The testing-plant was designed under the general direction of Mr. Quayle, aided by Mr. E. M. Herr.

"The drawings were developed under the immediate direction of Mr. E. B. Thompson, now superintendent motive power and machinery of the C., St. P., M., and O., but who at that time was chief draftsman for the C. and N. W. Mr. Quayle had been made chairman of the master mechanics' committee on exhaust pipes and steam passages, and some time before, while master mechanic at South Kaukauna, Wisconsin, had improvised a testing-plant by lengthening out the members of a passenger-car truck to make the wheel spacing agree with that of the drivers of the locomotive he

desired to test, and by mounting this truck bottom side up in a pit in such a manner that he could run a locomotive upon it.

"Encouraged by these earlier experiments, he later advocated the testing of locomotives at the Fortieth Street shops of the C. and N. W. The result was this plant. The proceedings of the Master Car Builders' Association will show that this plant was an important factor in the development of several committee reports dealing with the design of exhaust-pipes, steam passages, draft pipes and stacks. The plant was found useful also in working out various other problems of more immediate interest to the railway company.

"In recent years it has been idle. The plant consists of foundation-plates, pedestals, and three pairs of axles with their bearings, supporting wheels, friction-brakes, etc. It was the first of its kind to be supplied with permanent mounting rails, by use of which a locomotive could be rolled on or off the wheels without resort to temporary blocking.

"It is announced by Dean Goss, of the College of Engineering, that the plant at the university will constitute a portion of the equipment of the School of Railway Engineering and Administration, and that when installed it will be operated under the immediate direction of Professor Edward C. Schmidt, in charge of railway engineering."

IN THE HORNET'S NEST.

BY DAN DUANE.

A Life for a Life, with Love and
Vengeance to Spur Him On.

CHAPTER I.

When Carmita Came.



ACCORDING to the old French testament, which registered his birth as having occurred on May 4, 1797, Eugene Caillo was eighty-three years old at the time of his death.

Close on to fifty years he had lived on the high table-land at the base of Mount Whitney, hoarding, pinching, and delving into the earth for the yellow gold, until the superstition, ignorance, and vain imagining of the miners and cattlemen in the country for miles around had become accustomed to estimate his wealth as commensurate with that of Monte Cristo and other fabled possessors of fabled fortunes.

He was a mystery, and, therefore, speculation knew no limit. As a matter of fact, he was not a poor man; for when the money was eventually found, it counted up into the thousands numbered by eighty, and all in shining American gold with the significant stamp of the United States fair upon its face.

Old Caillo was a keen, crafty, avaricious fossil, bent almost double with toil and the self-imposed privations of his miserable existence. To him, the end of all things was the accumulation of gold; and, as Goethe's hero gave his soul for his lost youth, so did this aged miner give all that might have passed for that abstract quantity in his unwearying search for the metal that was to him the Alpha and Omega of life—the one thing he worshiped.

His claim covered about two thousand acres of the fairest and most fertile land in the mountains, and was known as "Cail-

lo's Flat." Crossing it laterally came the county road from Rosalia. The Crood, the swift-running mountain stream the Mexicans had long ago called El Rio Santa Maria, infiltrated the best portions of it, giving him crops of barley, wheat, and oats that were marvels to his few neighbors.

He worked early and late, and it hurt him sorely that twice and sometimes thrice a year, at plowing and harvest and in the spring *rodeos*, he was obliged to hire a few extra hands to help him secure the lavish bounty of nature.

But in all his "ground-sluicing" he was never known to work other than entirely alone.

To the right of the road, and facing Mount Whitney and the west, stood the house—an old Mexican *'dobe*, falling to pieces in many places, but, withal, good for years of shelter. It had deep-set, shutterless windows, a low, square roof, and was shaded from the hot sun of Southern California by massive fig-trees.

Three years before old Caillo died, Carmita came.

The mines called "Hardtack," "Rex Monte," and "Comet" were in full blast then, and paying well. The nearest town to camp was Tres Pinos, and that was seventeen miles away. "Caillo's Flat" was but six, a clear saving of eleven hard miles.

With crafty, coyote-like sagacity, old Caillo reflected on the situation, and decided he would become a store-keeper. There was plenty of room in the old house, so he fitted the north end of the *'dobe* with a rude counter and shelves, and notified the camps that he was prepared to furnish them with any necessity or luxury they required at a cost that would merely cover the expense of transportation into the hills.

Then he sent for Carmita.

Carmita was the child of his dead sister and her Spanish husband, also dead, by name Ramon Arcana. When she came to "Caillo's Flat" she had just commenced her eighteenth summer, and on her clear-cut, oval, olive-tinted face shone all the glorious, sad serenity of the southern sunset. Her eyes were luminous, starlit, and reflective, and when one looked into their liquid depths, and saw the wealth of passionate tenderness and true womanhood living there, he believed in a soul.

The new life seemed strange to her, and revoltingly hard and cruel—and most cruel of all things she saw was her uncle, Eugene Caillo.

Born a peasant, with all the shift and privation that entails, she had been the child of her father, and by him passionately loved and tenderly cared for. Now that he was dead there was no one of her blood but her uncle, and fate had given her to him.

There was a hunger in her heart ever for the one word of love that never came, for which all the strength and loveliness of nature surrounding her failed to compensate.

The coarseness of the miners and cattlemen who came to the store at whose counter she now presided, wounded her gentle nature as sharp thorns, and her whole being shrank and turned from the publicly expressed words and looks of admiration they sought to give her.

Love to her was so sacred, so holy a thing, she could not fancy its pure, white presence in the fumes of vile tobacco and still viler whisky. But she lived her life with courage and true womanly dignity, giving the sorrow and the unutterable longing in her heart no words, and doing her duty so faithfully, so patiently and uncomplainingly, that, had it been possible for old Caillo to have cared for anything, it would have been the beautiful Carmita.

CHAPTER II.

The Master of the Rancho.

THE master of Rancho Buena Vista, Philip Garrick, had been in the foothills since the last October, which was before Carmita came, and the comfortable log-house on Badger's Flat which he called home, was peopled only by his three vaqueros.

A mystery was Philip Garrick—a mystery rivaling in interest the fabulous possessions of old Caillo. Much and varied had been the talk and speculation regarding him, but

prophets and gossips of the range were for once utterly baffled and obliged to content themselves with their own not over-satisfactory conclusions.

He never spoke of himself or referred to the past in any way.

They only knew that six years back they had seen him for the first time when he quietly took possession of Noriega's stock and ranch; that he had paid cash for it with a check on the bank at Rosalia, which had been duly honored without question; that he had altered, repaired, and fitted up the place until his, without dissent, was the best ranch in the mountains.

His face was fair, with a light in his blue eyes that commanded their respect, despite its youth and the careless good nature of his smile. His figure was slight, erect, and athletic, and he rode well, and was singularly adept with a *riata* for a tenderfoot.

There was a certain inexplicable something about his carriage, his manner, and the tone of his voice they had never known before. And last, and what was, perhaps, greater than all else with them, he seemed in no way bothered by an insufficiency of money.

Gradually and unpresumptively he took his place among them, taking his share of the joys and sorrows of the small community with cheerful graciousness and manliness.

This continued until the morning he rode back to his home, in the spring after Carmita came, when he was, by all odds, the most popular man in the mountains—popular with all save one man, and that was James Gormley, superintendent of the Comet mine.

"You will observe well the *señor* who was just here, Carmita," cackled old Caillo, in his mystifying patois of mingled French, Spanish, and Mexican. "He is a gringo, oh, yes, but then different, my girl, far different from any you will see and quite my best customer, yes, better even than El Señor Gormley.

"We know nothing of him, actually nothing. A closer mouth than his is not to be found among my own or your mother's nation, but he pays well, girl—pays, and always in fair, yellow gold that is so beautiful to see; and you are fair to see, Carmita, fair to the eyes of youth, and, you understand me, I would have you smile your sweetest on the Señor Philip, for when a girl smiles the gold of young fools comes easily, and there is no better place for the Señor Philip's gold to come than to me, who understand how to treasure it and to keep it at its worth."

Carmita drew back. Her look pictured her disdain.

"Ha! ha! this young *señor* is rich, do you hear me!" the old man continued. "Rich! Two thousand fine cattle, and the finest *rancho* in the mountains. But don't lose your heart, he is not for you. You have your dear old uncle, and he loves you too well, far too well to lose you."

The thin, parched lips of the miser parted, showing the black snags of teeth in the skeleton jaw, while a grin of restrained satisfaction spread over his mummified face.

She had seen him only a few times, but since his first coming to the store life had grown fairer, almost dearer to her.

When the coarse and brutal admonition of her uncle reached her, the blood rushed violently to her olive cheeks, and she felt as if he had given her a blow, yet, withal, with a strange sense of guilt on her as if deserving it.

She could not have even told the little crucifix above her bed, but the subtle melody of Philip's tones, soft and caressing as the sigh of the south wind, had reached her and touched her and filled her with a happiness that was akin to pain.

Her southern nature, doubly strong from the control she had of it, had gone out to meet this new voice, this fair face, this gracious courtesy of a true nobility, as a lark springs out and upward to meet the morning sunshine.

His presence had come to her as the summer rain comes to a thirsty rose, and even before she had learned to speak the hard consonants of his name softly and reverently to the beating of her heart, she knew and felt herself a guilty thing, inasmuch as her womanhood shrank from what each stifled throb of her bosom told her to be the truth.

CHAPTER III.

Gormley Speaks His Mind.

WHEN the sun arose, then arose Carmita, and the manifold duties of the day began. The old house, from its former state of neglect and dirt, now shone with neatness and order.

Her hands, which toil seemed powerless to harden or defile, were never idle. This was a luxury her hitherto weary heart could not allow herself, even had her circumstances permitted its indulgence. With the simple morning meal finished, there was the house to be tidied up, and the poultry and calves to be

looked after, until the shadow of the sun on the kitchen floor told her it was time to take her place in the store in chance of possible early patrons.

Then she would seat herself at the door—the white crests of the mountains and the long white road stretching away to Rosalia before her, while the linnets and thrushes sang their love-songs and builded their homes in the fig-trees above her head.

Busily stitching on some garment of old Caillo's, she would lose herself in the one solace her life knew—her dream of Philip, for the white road that wound its way so sinuously through the barley and wheat of the fat lands of "Caillo's Flat" also took the direction of the Rancho Buena Vista. Just to think of him was a pleasure.

There was one face she dreaded—dreaded even more than the crafty, cadaverous face of her uncle when it was convulsed and distorted with avaricious disappointment and anger from a valueless day in the ground sluices.

It was the face of Gormley, the superintendent of the Comet mine.

Since her coming, his had been the eyes, and his the voice of any stranger to greet her the oftenest. A false, dark, sensuous face, fringed with a thick, black beard; a large mouth and aquiline nose; black, beady eyes, gleaming, restless, with the fascination of the rattlesnake, and a smile which, if given to a man following a lonely trail on a dark night, would cause him to feel for his six-shooter and keep Mr. Gormley at a respectable distance in front of him.

Gormley had told her several times that he loved her.

He had told her this ere she had been on the mountain two months, and all of her gentle nature arose in rebellion and disgust at his presence and his coarse words.

The vaqueros and the men at the various mines had noticed his attentions, and they, knowing him, and understanding the situation, and the utter impossibility for him to be honest in any way, except in an attempt to deceive some one, said, publicly, that "Jim Gormley never missed an opportunity in trying to feather his own nest, and that old Eugene Caillo's yellow 'shiners' were a mighty attraction."

With no greater barrier to their possession in his way than the frail life of the miser and the white throat of the girl, it behooved him to spend his smiles lavishly; to go often, and to stay long; to pass unheeded the ill-concealed repulsion and fear of the girl at

his advances, and to keep the way clear of all possible rivals.

CHAPTER IV.

Carmita Tells Philip.

"YOU will hear me, Carmita, you will not turn from me, and think my words untrue. Listen, my beloved. I take those stars above us as witness to my truth. Could I help loving you; could anything that knows the breath of life see you and not love you?"

"You have seen my love, you must have seen it. Day after day have I come here only to hear you speak, only to feel in my heart the glory of your smile.

"Life could not be life again without your presence in my soul, there would be no sunshine, no light to warm my eyes in the morning, and the nights would be worse than death—for in death, I might know you, Carmita."

The river of Wary splashed and crooned and sung over its pebbly bed; the far-off sound of sheep-bells came melodiously across the distance, and a crescent moon hung suspended as a sickle of silvery fire above the white brows of the Sierras.

In the old "'dobe," lost in dreams of his yellow god, lay old Eugene—and here in the soft light of the crescent moon, with the waters at their feet and love in their eyes, stood Philip and Carmita.

The moonbeams touched to silver her raven hair. Her bosom heaved and her breath came quick, but in her dark, passionate eyes there was no question, no attempt at concealment.

She placed both hands on his shoulders, and, looking up at him with the trust of a loving woman, said, in her sonorous, liquid, Castilian:

"Oh, my Philip! You have too much mercy for Carmita. You ask me do I love you, beloved. Look into my eyes and, read the answer there."

CHAPTER V.

The Missing Miser.

"SEÑOR! your words are useless! They are worse—they are cruel! They are a wrong to me, and a wrong to him who is more than myself."

Her big eyes flashed, and she drew herself up and walked away with the majesty of a goddess.

Gormley bit his lip and struck his boots two or three times sharply with his quirt—then the old, cynical, hypocritical smile came back to his face, and, following her with mock humility, he slowly said:

"Him, *señorita!* Excuse me if I fail to understand you. You have not, as yet, done me the honor to mention who 'him' is."

Carmita turned slowly, her eyes still, flashing.

"It is unnecessary, *señor*. Were you a gentleman you would not ask," she said quietly. With a slight, dignified inclination of her head, she entered the house.

Gormley stood for a moment irresolute whether or not to follow her further, but the look of her face daunted him. With a smothered curse, he walked to his horse, and, mounting, raked his spurs in the animal's flanks until it dashed furiously down the road snorting with pain.

"So, ho! my Señor Garrick, you have stolen the march on me, after all!" he muttered between his teeth. "And the fair Mexican flower will not only give you her sweetness, but will empty all the old miser's treasure into your already well-lined belt.

"She will, if Jim Gormley can't help himself. Well, we'll see, you accursed dog, we'll see; it's a frosty day in California when I get left."

The whole year was one glad, summer-time to Carmita. It mattered not that the flowers withered and died; that the birds all went away to the valley, southward; that the hills grew sere and brown; that the white mantles of the mountains seemed to be getting closer and closer with each day. No, it mattered not, for ever her heart sang; and the light that lay in her eyes was a fairer light than that of summer moons, for it was the light of perfect trust and absolute love.

Eugene Caillo had fought and continued to fight against the new-born happiness. His avarice had grown to extend to her, for she was a medium that produced much gold.

But Carmita was a woman now, and love made her strong. Patiently and cheerfully she bore with his complaining and upbraiding, but there was a look on her face that told him not to venture too far.

Then there was Philip now, and the cunning old man was crafty enough not to overstep the limit of his niece's endurance, as his reason told him that such an act would only produce a climax, the result of which would be the loss to him forever of his most profitable chattel. Were it not for this he would have struck her.

Had she been beautiful before, she was regal now. No passion-flower was more lustrous than her face; no mountain deer on the hillside more full of grace than she.

More than one strong, honest heart, beating in the broad breast of some cattleman or miner, sighed for her, as her soft fingers carelessly touched theirs when handing them a purchase at the store—but her eyes, with their radiant smile, were always out and away in the line of Rancho Buena Vista. Only one step and the sound of one voice could recall their gaze.

Gormley, after using all his deceits and wiles to provoke old Caillo to open revolt, had at last given up, and was seldom seen at the store.

Love had come to the old 'dobe, and love is greater than all.

The full moon of the last of December was hanging low on the snowy crest of Mount Whitney; a strange, weird light fell on the spectral peaks about him, and silvered the open lands of Caillo's Flat. The old 'dobe stood out in black and bold relief against the foreground of dazzling, ghastly whiteness. The shrill, mournful, savage cry of a mountain-lion came from the fastnesses of the mountains. The clock of the old kitchen struck eight, and the sound of a horse's hoofs, ridden at a gallop, fell sharp and distinct on the hard road.

As the sound of the horse's feet came nearer, Carmita rose hurriedly from her seat by the hearth, and, passing with a quick step to the door, flung it wide open to her lover, who was dismounting by one of the fig-trees.

Her face was white and weary. There was a frightened look in her deep, luminous eyes that was new to them.

"Oh, my Philip!" she said, as Philip drew her passionately to his arms. "It is good you have come, for I have been sore afraid and troubled. See, I am alone."

They entered the house, and she continued, "My uncle has not returned."

Philip looked questioningly into her eyes, and then scanned the darkness of the old kitchen lighted by the meager flame of one candle and the scant blaze on the hearth.

"Not returned, Carmita! Do you mean that he has not been home since morning?"

"Not since five o'clock this morning, Philip. He was working at the ground-sluicing on Bear Flat, as you know, and nobody ever works with him at the ground-sluicing.

"The evening meal was set at six, and I

was so happy thinking of to-morrow that I scarcely heeded the darkness and he not yet home. Suddenly the clock struck seven, and then a wild fear came to me, and I reproached myself with the ingratitude of my happiness when that frail, tottering old man might have met some terrible calamity.

"Ah! it has been a long hour, my Philip, waiting your coming, but now that you are here I am strong again, for you will find my poor old uncle and bring him to his home! Do this for me!"

"Carmita, were you to wish it, he should have my life; you know that; but the man who has been cruel to you and so wronged me can never have my respect or my esteem.

"The old fellow has probably worked late, and, darkness catching him, has stopped at one of the camps. But he's an unfeeling wretch to leave you here alone to worry about him.

"However, set your fears at rest, my beloved. Old Eugene is too knowing to lose himself in these hills.

"But for your sake, and if you tell me to go and leave you here alone, I'll ride quickly over to the camps and find him."

"Yes, go, Philip! I've no fear to be alone! It will comfort my heart that my Philip, and so brave and strong an arm as his, are so merciful and forgiving."

The hours seemed long to her, but she waited with the patience and courage of a woman who loved—waited, alone, in the old house on the mountain.

She watched and listened and waited into the cold light of the dawn, and prayed for the safety of the one man who had never given her a kind word.

The west wind lulled in its moaning, the savage call of the mountain-lion was still, there was a convulsive heaving of the opaque shadows in the east.

The morning dawned, and Carmita was still alone.

CHAPTER VI.

The Finding in the Sluices.

AT length Philip Garrick returned. His good horse, Apache, was worn and jaded. There was a strange, baffled look on the rider's face—for he was alone.

"I have been everywhere, Carmita," he said wearily, "and no one has seen your uncle."

Carmita's tears were her strongest pleading that Philip should renew his quest.

He saddled a fresh horse and went forth once more in search of the man who had ever been his enemy. He was weary, embittered, and anxious, not for the fate of old Caillo, but for the girl whose face was so white, and whose eyes spoke to him so wistfully, so pleadingly, for his saving aid.

He took the trail directly to Bear Flat, and, following the course of the stream, he reached the open country.

Everywhere were the traces of the old miser's toil. The land was fissured and broken in all directions by deep gulches, all issuing transversely from the stream. He staked his horse with his *riata*, and commenced his search.

The sun told him it was two hours of mid-day, when, at the head of one of the sluices, he came to the place where Eugene Caillo had eaten his frugal noonday meal not twenty hours before.

This was the first clue.

Quickly he examined the sides of the sluice. Leaping into it, he walked slowly in the direction of the outlet.

The sluice was, perhaps, eight or ten feet deep, with a width at the top of two-thirds that number, and narrowing gradually as it reached the bottom, giving it the shape of a wedge.

The soil was of a loose, gravelly formation, with no piece of rock visible larger than an egg. Philip particularly noticed these characteristics. Nor at any future time was any stone discovered in the gulch which, of its own size and weight, was sufficient to cause a man's death, unpropelled by other forces than its own gravity.

He had followed the cut for three hundred yards from its source, when he suddenly halted as one turned to stone.

The cold shudder that passed through his blood and the sight that met his startled eyes told him his search was ended.

There, at the bottom of the sluice, face down, his body partially covered by gravel and dirt, lay old Eugene Caillo. The point of his pick protruded from above his shoulders, as if, while using it, he had fallen on it. By his side lay a heavy iron bar.

Controlling himself and conquering his aversion, Philip quickly removed the debris from the prostrate form, and, lifting the poor, attenuated body in his arms, bore it carefully to the bank above.

His first thought was for Carmita. What she would say; how to tell her?

True, she had never loved the miserable apology of humanity which now lay before

him, with the vision of the yellow gold fled forever from the crafty eyes. But with her—true child of the south, bred to a sense of obedience and self-denial which makes duty to one's kin almost take the place of love—he knew that the tragic ending of the cruel old miser would be deeply deplored.

Thoughts like these flitted through Philip's mind as he stretched the withered form in the shade of a giant cottonwood. Covering the face with his own jacket, he mounted his horse and rode rapidly down the trail.

There was nothing to do but to break the news as tenderly as he could to Carmita, and then harness some mules and bring back to the 'dobe all that remained of the miser.

"It is even as I thought, Philip," said Carmita quietly, as she slowly brushed the big tears from her eyes, "it is even as I thought; and may Heaven have mercy on his weakness and forgive his sins."

Excitement ran high on the mountain when the news got abroad that old Eugene had been found dead in the ground-sluices by Philip Garrick. Miners, prospectors, vaqueros, and cattlemen for miles around flocked to the 'dobe and to Bear Flat, the scene of the tragedy.

Various and conflicting were the opinions and theories entertained as to how old Caillo met his death. He had been laid in his grave a fortnight before theory and opinion took the form of direct suspicion and denunciation.

Then the storm brewed by villainy and fostered by ignorance, greed, and superstition, burst, spending the full fury of its wrath on the unsuspecting heads of Carmita and Philip Garrick.

CHAPTER VII.

The Breath of Suspicion.

SHOW me an ignorant man, and I will show you a coward. Show me a brutal man, and I will show you a villain. Gormley was all of these.

Poisonous as a rattlesnake, vindictive and subtle as a blackmailer, smarting under the great disappointment to secure, through Carmita, the gold of Eugene Caillo, and stung to madness by the girl's calm contempt for him, Gormley had remained as quiescent as an anacanda waiting for its prey.

But now, behold—fate or his own hand had brought the prey within reach of his fangs.

Very insidiously, very cautiously, had he set his poisonous tale afloat, giving such bold and compact reasons, and using the casuistry fate had placed in his hands with such discriminative skill, that almost before he realized it the whole mountain and neighboring towns were aflame with the most ignorant suspicions against Carmita and Philip.

"Not that we can ever bring them to justice—oh, no," he said. "They have managed the job too cleverly for that. But it is only fair to yourselves not to care to mix with murderers, even though one be a mighty fine-looking girl and the other the owner of the best ranch in the hills.

"It doesn't take a wise man to see that they are the only ones who could be benefited by that old miser's death, and, depend upon it, it was Philip Garrick's arm that sent old Eugene to his last account—although, of course, we may never prove it."

All this he would say to bind his denunciatory remarks of Carmita and Philip as he rode through the country burning the torch of a dastard vengeance.

To Carmita, the shock caused by these suspicions came as a blast of wintry winds to a rose-garden.

When Philip told her, she had no word to give him in reply. A face, whiter than his own, turned mutely to him, with a wild, questioning appeal in her frightened eyes for the explanation he could not give.

A will, attested and signed, bearing recent date, had been found in the iron-bound oaken box, where the old miser kept his papers.

It bequeathed all he possessed, without reservation: "To the daughter of my dead sister, Madelon Carmita Arcana."

With the will was a paper containing descriptions and rude diagrams, accurately locating the place of concealment of old Caillo's treasure.

Philip read to the end the contents of both documents, and, without a word of comment, placed them in Carmita's hand.

A tremor passed over her when she touched the parchment. Bursting into tears, she flung her arms round her lover's neck, and sobbed convulsively. Then she was strong again. Quietly drying her eyes, she returned the papers to Philip.

"Nay, my Philip, give not to me these writings, the unholy worth of which has already sought to make Carmita accursed. Hide them once more from all men's eyes in the black secrecy of my uncle's strong-box, and there let them lie uncared for and un-

heeded until the morning sun brings back that day when you and I are free from taint to all the world."

CHAPTER VIII.

The Parting.

AND now, once more, spring had come back, and the first fair flowers of the year were blooming on old Eugene Caillo's grave. Apache, ready saddled, stood under the fig-trees before the 'dobe, waiting to bear his master away.

A few months before Gormley had suddenly left Bear Flat.

"Oh, Carmita, think ere it is too late. Is there no other choice left me than this? Let the law make you mine in name as love has made you mine in soul. Then will my going have no terror for me."

Into the grand, serious, eyes of the girl came a light of quiet heroism that made them luminous as tropic stars. With the movement of the rich, undulating grace habitual to her, she approached Philip, wreathed his neck with her arms, and, pressing her lips to his, looked into his face and said, with the calmness of absolute passion:

"My beloved. Oh, my Philip. If I could only die for you. Help me to try to live. There will be no light for Carmita's eyes, no gladness for her heart. Day and night she can only work and wait and pray.

"Philip, this is love. Carmita's heart-ache, Carmita's life is nothing; but you, my beloved, you are all. Through all your ways, in waking and in sleeping—there will my heart be. Thou wilt think of me, here by the mountains in body, but thy soul will tell you Carmita has no life but where you are. I am strong enough to smile upon your going. I am strong enough to put away the heaven of your arms for the honor of my love for you—for the honor of your name."

When the sun set and the first stars were smiling on the rich valley-lands of Rosalia, Philip Garrick rode wearily through the little town with no response in his heart to the soft, languorous passion of the guitars that fell so dulcet on the air.

There was music and dancing in Rosalia. Lights were gleaming from every rose-bowered piazza and every house. Merry voices, shouting, laughing, and singing in the sensuous Mexican patois reached his ears as Apache cantered slowly through the streets redolent with the breath of orange-blossoms and countless roses.

There was music and dancing in Rosalia—but under the shadow of Mount Whitney, in the lonely kitchen of the old 'dobe, a girl with a white, set face, and a brave light in her eyes, knelt before the cross that was her mother's and whispered one name:

"Philip."

Anger, fierce in its righteousness, vengeance relentless in its pitilessness as a Corsican's, filled Garrick's veins, when the first breath of their evil suspicion had reached him touching Carmita.

For himself, he cared nothing what they thought or said. His strength to defend himself lay in the muscles of his right arm, and there was no man on the mountain who failed to hold them at their worth.

But Carmita! It was as well to hold the snow-flower corrupt or the fawn on the mountainside a conspirator.

Resolutely, methodically, untiringly, he went over every incident connected with the last days of old Caillo, with truer fidelity than a trained detective. He spent his money lavishly and in the right places, and was not long in tracing to Gormley the origin of all.

First there was the miner's protestation of love, and his repulse with ill-concealed loathing by Carmita; his threat of vengeance, and his mysterious and ominous silence.

Then, since the superintendent had so suddenly left the mountain, Philip had proved, by two reliable witnesses, that Gormley had ridden to Bear Flat on the day preceding the murder, in the endeavor to secure a loan to pay off his men. He had failed, but it was apparent to Philip that he must have been the last man to see the old miser alive.

Finally, while searching the ground-slucce at the place of the old man's death, Philip had found the torn fragment of an overall bearing the stain of blood and matted hair.

Closely examining the iron bar, he had little difficulty in tracing the blood-stain which had been hastily wiped from it by the piece of overall, and, as proof corroborative, partially buried in the sand, he drew forth to his eager eyes a small magnifying glass such as are used by prospectors, stamped with the initials "J. C. G."

Next to his love for Carmita was the fierce happiness of his coming vengeance.

"Carmita," he said almost exultingly, "the world is too narrow to hold the life of that murderer and my life, and when I reach him, beloved, then will Philip Garrick give back to him such mercy as he gave to me and mine."

After a month's time, he wrote thus:

As yet, there is nothing with me but your love and hope.

Still later:

It may be there are now twice a thousand miles between you and me, Carmita, but I had traced the villain to this far north-land, only to reach here and find he had doubled, and is now traveling southward, but justice and your love go with me, and I shall find him in the end.

All through the golden summer-time came the letters, alternating with success and disappointment, but never losing hope.

At length, at the close of a bright, crisp day early in December, a stranger came to the old 'dobe, riding straight from Rosalia, and handed to the patient Carmita a yellow envelope which held a telegram from the city of Carnullo—from Philip Garrick to Carmita Arcana.

It bore these words: "I have found Gormley."

Carnullo was to the southwest what the fair city of Paris is to France—its metropolis. The smallpox was raging there. Each night the people lifted their eyes to the brazen, cruel skies, and prayed for rain and the breath of the salt wind from the sea to banish the pestilence. But neither the wind nor the rain heeded, and despair succeeded terror.

At the beginning of a hot, sultry night, when the skies seemed one mass of seething, molten brass, Philip Garrick knocked at the outer gate of the city's pest-house.

"You have within a patient named Gormley; I wish to see him," he said to the attendant who answered his summons.

"I am sorry, sir, but it is impossible," replied the attendant.

"Nothing is impossible to an earnest man, my friend," said Philip, quietly interrupting him. "Here is gold. Admit me to Gormley."

The man trembled violently, and began to waver. Before him was more than a year's pay. Surely, it were worth braving detection.

"If you were some very near relative, sir," he stammered, "I might, from my pity for you, risk losing my place, for the patient you speak of is very bad, and without wishing to hurt your feelings, sir, may not recover."

A smile of double meaning flitted across Philip's white face as he placed the purse in the man's ready palm.

"Content yourself," he said. "I am his brother."

Around him was death in its most hideous,

loathsome form. The air he breathed was death too horrible even for thought. But the shadow of the smile still rested on his white face, and the steely gleam played in his blue eyes. He was not thinking of death; he was not thinking of anything.

He was beginning to feel his vengeance.

The room was absolutely bare—absolutely merciless. Through the open windows came the brazen glare of the sky and the noise of the “helpers” moving coffins. On a rude bed in one corner, naked and covered only with a sheet; tossing and writhing in the agonies of death, lay Gormley.

Philip almost trembled. He was afraid he had come too late.

The attendant entered with pen and ink, which he placed on a small table, and then retired.

Crossing to the bed, he touched the dying man before him, saying:

“Gormley! Gormley! Call back your senses once more, and look. Yes, I am Philip Garrick.”

Again the smile flitted across the white face, and the gleam of steel shone in the blue eyes.

The effect of the words and the tone of his voice on the writhing wretch on the bed were as a powerful electric shock.

The bulging, distended eyes stared blankly into his; the swollen, distorted mouth made a wild effort to speak—at last finding words in:

“Fiend! have you come to taunt me with the murder of Eugene Caillo?”

Philip trembled. Bitter, cruel, merciless words were on his lips, but, ere his tongue gave them utterance, he seemed to see there before him, in the midst of the pestilence, the pure face of Carmita.

Following the desperate helplessness of Gormley's question, he seemed to hear her last brave words to him, “Thou wilt be merciful, my Philip, even as we all need mercy.” Love was stronger than vengeance.

Bending once more over the dying man, he poured into his throat a potion which had its effect at once.

“Gormley, listen,” he said in a softer tone and with the smile gone from his face and the gleam from his eyes.

“I came here to gloat over your death; I remain to help you save your soul. Death is almost with you, no power on earth can stay its coming. It is needless for me to tell you that I have proof absolute of who killed Eugene Caillo; therefore, death is your kindest friend.

“You know the wrong you have done the innocent. You told Carmita you loved her. Let your last act be to help secure your eternal pardon. Repair your wrong to Carmita. See! Here are pen and ink, and here is a paper known to no eyes but mine. You know me, and you know I do not lie. This paper is a simple confession made by the man who killed old Caillo. I want you to sign it.”

His staring eyes were getting dimmer, his breath came with a sickening gurgle, but the spark of divinity latent in all humanity brightened him, and he took the pen in his black and swollen fingers, scrawling the name, “James C. Gormley,” and, without a word, fell back on the pillow, dead.

Philip had found his vengeance, and its taste was as dead sea fruit.

“You have earned your reward,” he said to the attendant, “but he is dead. Here is more money—let him be buried with the respect due a man.”

He went to an obscure lodging, bathed, and changed his clothing; thoroughly fuming in sulfur fumes the parchment that held the precious confession. This he placed in an air-tight cylinder, and concealed it on his person.

Late that night the wire flashed to Rosalia, and, with the dawn of day, a special messenger bore over the mountains to the old 'dobe these words: “I am coming home. Philip.”

(To be continued.)



Early Railroad Days In New England.

BY CHARLES FREDERICK CARTER.

BESIDES enjoying the proud distinction of having operated the first railroad in America, it is also the boast of New Englanders that no other part of the country is able to show the same degree of development in early railroad construction. The land of the Pilgrim Fathers may well be termed the birthplace of American railroads, for, with a few exceptions, most of the first attempts at operating wheeled vehicles on a track were fostered there.

It is true that the cautious Yankees were a little slow to put their money into such a new and venturesome project, but they soon discovered that the railroad had come to stay and was destined to be a sure dividend-earner.

Some of the practises of these early railroaders will bring smiles to the present-day railroad men to whom such stunts as a brakeman setting out on foot to locate a missing train or a station-agent having to keep the right-of-way clear of snow in winter are scarcely in the realm of probability.

When Every Train Had Two Conductors, and Agents, After Selling Their Tickets, Went Out and Collected them from the Passengers, and Locomotives Could Haul Five Cars.



CONSIDERING the Yankee's reputation for ingenuity, it is not to be wondered at that New England is credited with the first railroad ever built and operated on this side of the Atlantic. The formal opening of this pioneer line, the so-called Quincy Granite Railroad, was an event of some importance, which drew a considerable crowd of spectators.

Some were there who had been to England, where they had seen some of the colliery tramways then in use. These learned travelers pleased Gridley Bryant, the builder of the line, by telling him his railroad was quite as good as any in England. It makes this event seem very recent to learn that the man who drove the first team, or rather the first horse, on this first American railroad was still living at Chelsea, Massachusetts, as late as August, 1893.

Lewis Cheney, this original railroad man, in spite of his eighty-five years, had a very clear recollection of that historic opening-day in 1826, and he loved to tell how the crowd gaped when he cracked his whip and started the horse which drew the first load of sixteen tons of granite for the Bunker Hill Monument on three wagons, weighing five tons.

The road was slightly down-hill all the way from the quarry to the river, which helped the horse without detracting anything from the amazement of the crowd.

Some of the more impressionable spectators, who saw the horse driven by young Cheney walking off with a load of twenty-one tons, thought that in time railroads might amount to something, but it would hardly have been in keeping with the Yankee reputation for shrewdness if such radical views had been accepted implicitly on such slender evidence. New England, in fact, ac-

cepted the railroad with strong mental reservations.

When the innovation got into the happy hunting-ground of the Legislature, which it soon did, it excited the most intense alarm. Lawmakers had not then learned what a blessing a railroad bill of any kind can be to the politician who knows how to manipulate it skilfully.

This first unwelcome intrusion of the railroad in the State House was in the form of a resolution to the effect that a railroad from Boston to the Connecticut River would be of public advantage. Upon this innocent assertion the conservatives jumped with shameless disregard of the Marquis of Queensberry rules.

"Pass this resolution," shouted one of them, his face red and moist with excitement, "and who can predict the consequences? If we should say by our acts that such a work would be of advantage, who can say that some daring agitator may not arise and put the idea into practise? If such a work should be undertaken, the public credit would be overthrown, and every dollar of property in the Commonwealth would be in jeopardy."

The First Surveys.

After fierce opposition, the resolution was adopted by a majority of one vote. The forebodings of the minority, which came so near being the majority, proved to be only too well founded; for, after a great deal of discussion in the newspapers and in pamphlets, a daring agitator did induce the Massachusetts Legislature to authorize the appointment of a board of commissioners to cause surveys to be made for a railroad route from Boston to the Hudson River at or near Albany.

A large part of the route was surveyed that same year, to the infinite delight of the inhabitants. Not only on that survey, but for several years afterward, the country folk would turn out in a body and follow the surveying parties all day long, manifesting the liveliest interest in every move.

The engineers, like all their kind in those early days, were self-taught. Their equipment was very scanty, usually consisting of a pocket compass, and perhaps a level, and one of those heavy old iron chains, which were better suited for logging than for surveying.

The axmen with the parties, young farmers hired for the occasion, lost no opportunity

to air their knowledge of engineering. One of the early engineers relates that one day he overheard an axman explaining to a group of inquisitive Yankees that the engineers found the distance across a river by measuring along its bank.

"But haow kin he figger it aout that way?"

"By logarithms, ye darned fool!"

How a Railroad Was Run.

The next Legislature authorized the appointment of a board of directors of internal improvements, consisting of twelve members, and appropriated money to finish the surveys and provide for plans for a railroad. The survey to the Hudson was completed, and three lines were run from Boston to Providence. In a report to the board of directors, published in 1829, Daniel Treadwell and his associates recommended that both roads should be built by the State. In trying to make the directors understand how a railroad was run, Treadwell said:

"Let us take an example of a railway which we will suppose to be one hundred miles long, and on which coaches to travel nine miles and freight-wagons to go three miles an hour enter upon their journeys at both ends of the railway at intervals of twelve hours only. The wagons in one direction must meet those of an opposite direction at distances of sixteen and two-thirds miles from either end of the railway, after allowing twenty-six minutes for rest, feeding and changing horses at each interval.

"The coaches would meet the opposite coaches midway; and they would meet trains of wagons at the distance of twenty-five and seventy-five miles from either end of the railway. There would then be eight points of meeting on the hundred miles, at each of which a siding or passing-place must be provided; and it must be evident that if the carriages arrive within the prescribed time, the passing would be effected without the least difficulty. Should a train of carriages arrive at a passing-place before the prescribed time, it would only be necessary that they should wait for the opposite train to arrive, when they would enter on the next stage of their journey."

Notwithstanding this lucid explanation of the *modus operandi*, the Legislature refused to invest any public funds in such a revolutionary venture. However, there was no objection to authorizing private individuals to fritter away their money that way, so several

charters were granted. They came to nothing, for no one would risk a dollar on railroad building. The Yankees were too shrewd for that.

Money-Back Stocks and Bonds.

The railroad cranks were so persistent that they returned to the fray at the summer session of 1831. The charter of the Boston and Lowell, granted in 1830, was amended to make it more attractive to possible investors, and the Boston and Providence and the Boston and Worcester Railroads were chartered.

The capitalists of that early day peremptorily refused to have anything to do with so crazy a scheme as a railroad; but by this time a few credulous business men of modest means could be found who ventured to put down their names for small amounts of stock. In popular parlance, though, there was a string to the subscriptions, for the subscribers reserved the right to back out if they did not like the outlook after receiving the reports and estimates of the engineers.

Surveys were vigorously carried on during the season of 1831. Next year the organization of the Boston and Worcester was completed, the subscriptions were made final, and in the autumn of 1832 contracts for construction were let. In the summer of 1833 track-laying was begun. The first nine miles from Boston to West Newton were opened April 13, 1834. By July 10 the track was extended to Needham, thirteen miles farther, and by November 18 of the same year to Westboro, a distance of thirty-two miles.

Soon after the line was opened to Needham the first locomotive built in New England was delivered to the Boston and Worcester.

"This locomotive," said the Boston *Advertiser*, "was built by Mr. Boulton at the Mill Dam Foundry in this city for the Boston and Worcester Railroad. The 'Yankee' is modeled after an English engine imported for the Lowell road, and takes regularly a load of forty tons in forty-seven to fifty minutes. It has made one mile in two minutes, three seconds.

The first train ran into Worcester, forty-four and five-eighths miles from Boston, July 3, 1835, and three days later a train-load of Bostonians made the run to Worcester in the remarkably fast time of three hours, to take part in a celebration of the completion of the road.

The construction of this line used up all the money that could be raised in Boston for railroad construction. The capital for the Boston and Providence was obtained in New York, while that for the Boston and Lowell was provided by manufacturers in the latter city. Both roads were completed in June, 1835, just a few days before the Boston and Worcester.

With the exception of the Norwich and Worcester, also completed in 1835, no further railroad building was attempted in Massachusetts for some time. The canny Bay-State folk concluded to wait and see how the railroads turned out before risking any more time and money on them. They were not to be carried off their feet by any spectacular performances, either.

Two Anti-Railroad Towns.

As late as 1842, when the Old Colony Road was first proposed, the opposition to it was strenuous, particularly in Quincy and Dorchester. A meeting was held at Quincy to fight the railroad, at which it was pointed out that a railroad to Boston would affect the price of oats, and so injure the farming interests of the town besides "breaking up Mr. Gillette's business."

Mr. Gillette was the proprietor of a stage-coach, which daily took six passengers to and from the city. Dorchester sent a committee to the Legislature to oppose the charter with every means at its command and thus prevent "so great a calamity to our town as must be the location of any railroad through it."

If it couldn't do that, the committee was instructed to try at least to have the road pass through the outskirts of the town. The efforts of the committee failed utterly. Mr. Gillette's business was ruined just as had been predicted, and the landholders of both towns found their property soaring in value from \$75 an acre to \$5,000 an acre, in spite of all they could do.

Record-Breaking Locomotives.

Meanwhile, the railroads were fighting their way in the face of strong opposition. Those first Massachusetts roads had only been in existence three years when they were visited, early in 1838, by J. Knight and B. H. Latrobe, the Baltimore and Ohio engineers, who were making a tour of all the American roads then in existence, in search of pointers to be applied in the conduct of their own road.

For their benefit, the Boston and Lowell folk trotted out the locomotive "Patrick." This iron monster weighed 81-5 tons, had cylinders 11 by 16 inches, a single pair of drivers 5 feet in diameter and carried a steam pressure of 70 pounds. On January 18, 1837, the "Patrick" had achieved the remarkable feat of hauling 32 open cars weighing 3,800 pounds and 5 covered cars weighing 5,000 pounds each, with loads which brought the total weight of the train up to 179 tons, a distance of 26 miles in two hours and fifteen minutes.

How the Pasteboards Were Handled.

The heaviest grade on the line was 10 feet per mile. This was the record for a locomotive of its weight, but the "Stonington," which weighed a trifle over a ton more than the "Patrick," and having larger cylinders and smaller drivers, hauled a train of 49 cars, making a load of 234 tons, 26 miles in 51½ minutes.

The rolling stock owned by the company early in 1838 consisted of 6 locomotives, 27 passenger-cars, 3 baggage-cars and 99 "burthen" cars. Ten miles of the track was laid with H rails and 26 miles with fish-belly rails. The "General Agent," at a salary of \$3,000 a year, was the chief executive in charge of everything. The laws of Massachusetts required a brakeman to each two passenger-cars. The brakemen got \$30 a month, and it also took two conductors at \$45 a month to run a train.

This plan of having two conductors to a train was not peculiar to Massachusetts. On the New Jersey Railroad, in 1838, two conductors were required on a passenger-train of six four-wheeled cars and a baggage-car, which made the run between New Brunswick and New York at the rate of twenty miles an hour. One conductor went through the train and sold tickets to all passengers who boarded it at way-stations, while the other followed and collected them.

The selling conductor was furnished with a supply of tickets every morning. In the evening he turned in his cash and unsold tickets. Only the terminal stations, at New York and New Brunswick, could afford the luxury of ticket-agents, but "Superintendent of Transportation" George L. Schuyler declared over his signature, December 2, 1837, that the double conductor scheme had been tried for two years and had given satisfaction.

On the Long Island Railroad, at the

same time, "ticket-masters" instead of agents, at \$700 a year, sold the tickets and kept a record of the receipts, the name of the locomotive, the number of cars and passengers, the starting time and amount received for baggage and other details. At that time passengers were allowed fifty pounds of baggage free, while excess baggage had to pay two and one-half cents a mile for each hundred pounds.

A conductor, also at \$700 a year, collected the tickets. The engineer on the passenger locomotive, which burned a cord of wood that cost \$4.75 in running forty-eight miles and required daily two dollars' worth of repairs, received two dollars a day. His fireman and the brakeman each received half that sum, which simplified bookkeeping, for thirty days simply meant thirty dollars.

But to return to the Massachusetts railroads: Each road was operated by its own code of rules, regardless of what its neighbors did. For example, the rules on the Boston and Worcester required a freight-train to wait at a meeting-point forty-five minutes for the opposing train. If it had not arrived at the end of that time, the conductor was to take the engine and go and find out what was wrong.

On the Boston and Providence a train was required to wait fifteen minutes only at meeting-points. Then, if the opposing train didn't show up, a brakeman was sent with the "sign of a brakeman," which was a blue flag, to hunt up the tardy train. If at the end of another quarter of an hour neither train nor brakeman had appeared, the waiting train was to proceed with due care and prudence. If a train was delayed on the road for thirty minutes, the rules required that a brakeman be sent ahead with a blue flag.

Odd Practises of Early Railroaders.

In those early days the station-agent was no mere *bric-à-brac*. He had to do something for his salary. On the Boston and Providence, where the agents were dignified with the title of "master of transportation," they had first to sell the tickets, which were lettered like theater tickets now, with the cars labeled to correspond.

And then they went out and collected them, with the assistance of the conductor, while the train waited at the station. It was no sinecure, either. One train on September 5, 1837, carried 233 passengers, making the run of forty-one miles from Boston

to Providence in two hours and thirty-five minutes.

On the Boston and Worcester the locomotive department was under the immediate charge of the "depot-masters," otherwise the agents, who were held responsible for the good condition of engines and cars, and who were required to expedite the movement of trains and give orders to the enginemen.

In case of accident, it was the "master of transportation," not the conductor, who was required under the rules to take the necessary steps to get the disabled engines and cars on to the nearest turnout and open the line again. But it was in winter that the agent got what was coming to him. In an order, dated December 5, 1836, J. F. Curtis, superintendent of the Boston and Worcester, thus lays down the law:

"During the present winter it is expected that the road will be cleared of snow principally by engines and snow-plows, and the services of snow contractors will therefore be dispensed with unless specially called upon. The agents at the depots are expected after a heavy fall of snow to turn out with a horse and scraper and a few men and pass over the track from one depot to the other, to wit."

The Duties of a Station-Agent.

Here follows explicit instructions, defining the limits within which each agent is responsible for cleaning the track. The order then continues:

"The proper team will consist of two horses and four men. It is especially necessary to turn out promptly after a wet storm of snow and rain, as severe cold usually follows. Last year the road was closed for a week for want of a few hours' labor at the right time. Activity and energy on the part of agents will be duly appreciated by the corporation."

Engineers, too, had to do something for their two dollars a day. They could not show up at the last minute before leaving-time wearing kid gloves and a cigarette and turn their engine over to a hostler as soon as they came to a stop at the end of their runs.

When they were not on the road they were expected to tinker up their machines. Here is an extract from the rules for their guidance on the Boston and Worcester:

"No engineman will be employed who does not feel and show by his conduct regard for the interests of the company by taking great care of his valuable machine, examining her closely, seeing that she is kept in

fine order, well oiled and fit for the road, and when out being careful how she is run."

And maybe they didn't teach the fireman his place. The Boston and Lowell preferred common hands at a dollar a day for firemen, because they were less likely to aspire to become enginemen. Such men were supposed to be more content with their pay and their jobs than mechanics possessing a knowledge of the engine that would fit them to take charge of it.

The First Railroad Organization.

After they had once got started, the New England railroads and the men who operated them made wonderfully rapid progress for a time. New England railroad men were the first in the world to appreciate the benefits of organization. The first of all railroad organizations was proposed at a preliminary meeting held April 5, 1848, in Boston, at which Isaac Hinckley, Charles F. Gove, Onslow Stearns, S. H. P. Lee, William A. Crocker, George Haven, Luther Haven, John Russell, Jr., William Parker, William Raymond Lee, Waldo Higginson, Charles Minot, and S. M. Felton were present.

At a second meeting, held on May 3, 1848, the organization was formed under the name of the "New England Association of Railroad Superintendents," with charter members representing twenty-five railroads.

This organization, at its meeting October 24, 1849, for the first time in the history of the railroad, took steps to adopt a standard time instead of local time for the movement of trains. A resolution was adopted in which it was declared that the association was "sensible of the great importance of a uniform standard of time upon railroads in New England." The time of a meridian thirty miles west of Boston was adopted as the standard, and this time was put into effect on fifteen railroads November 5, 1849.

Meanwhile the Western Railroad, which was to form a part of the line to the Hudson River, chartered in 1833, was growing slowly. The first sixteen miles were graded in 1837, and the first train ran into Springfield October 1, 1839. On September 13, 1841, the road was completed to Washington Summit. The western end of the route, under the name of the Albany and West Stockbridge Railroad, was completed from Greenbush, across the river from Albany, to Chatham Four Corners, a distance of twenty-three miles, December 4, 1841.

By using fifteen miles of the Hudson and Berkshire Railroad's track, a through route between Boston and the Hudson was established. Nine years after first breaking soil, through trains were running over this two hundred miles of road, crossing a summit at an altitude of fourteen hundred feet above sea level in ten hours and forty-five minutes.

An Influx of Lines.

Other roads were growing in every direction, not only in Massachusetts, but in Vermont, New Hampshire, Maine, Rhode Island, and Connecticut. In 1851 Massachusetts was the proud possessor of seven trunk-lines and other railroads, amounting in the aggregate to 1,411 miles, representing a cost of \$60,992,183. In 1850 they carried 8,973,681 passengers and 2,500,000 tons of freight, earning \$7,445,961.

Every one of the thirty-two towns of 5,000 inhabitants or more in the State had one or more railroads, while seventy-three out of ninety-eight towns having a population between 2,000 and 5,000 were on railroads. A police count made by order of the city marshal showed that on September 6, 1851, 116 passenger-trains, carrying 11,963 passengers, arrived in Boston, and 120 trains, carrying 12,952 passengers departed.

For twenty years' work, this was a pretty good showing. And this wasn't all, for these Massachusetts railroads made connections with 2,420 miles of railroads outside the State, which had cost the builders \$91,749,035. All these roads brought trade to Boston, which was the basis for an era of prosperity unparalleled in the history of the city.

Boston's Railroad Jubilee.

Under the circumstances, Mayor John P. Bigelow and the city council, with the co-operation of the rest of the city, felt warranted in arranging for a railroad jubilee on September 17, 18, and 19, 1851. The specific excuse for this jubilee was the opening of railroad communication between Boston and Canada. In his proclamation, dated August 1, 1851, fixing the time for the jubilee, Mayor Bigelow felicitated Boston upon the fact:

"The several lines connecting us with Canada, northern New York, the Great Lakes, and the Far West are now complete, uniting us by railroad and steam navigation with thirteen States of the Union, comprising an area of 428,795 square miles, the two Cana-

das, the lakes with their 5,000 miles of coast, and bringing within our commercial sphere a population of 10,000,000 inhabitants."

A committee of seven, led by Francis Brinley, president of the council, was sent to Toronto to invite the Earl of Elgin and Kincardine, Governor-General of Canada, and other dignitaries and leading citizens of Toronto, Montreal, and Quebec to attend the jubilee. The committee, starting August 9, went by way of Northfield, Vermont, and Rouse's Point to Ogdensburg, covering the four hundred miles at an average speed of twenty-two miles an hour, including stops. From Ogdensburg they went to Lewiston, Hamilton, and Toronto by steamer.

Canada received the Bostonians hospitably, and heard of the coming jubilee with great enthusiasm. The committee returned home by way of Montreal and Quebec, reaching Boston August 21, after a journey of eighteen hundred miles.

Welcome Wearies the President.

The railroad jubilee was quite the biggest celebration ever seen in New England up to that time. President Fillmore, who had taken part in the celebration to commemorate the completion of the Erie Railroad from Piermont on the Hudson to Dunkirk on Lake Erie, on May 14 and 15 of the same year, attended, accompanied by Mrs. Fillmore, Secretary of War Charles M. Conrad, and Secretary of the Interior Alexander H. H. Stewart.

The Bostonians certainly did their best to make President Fillmore glad he came. A committee met him in New York, and escorted him by steamboat to Fall River. There a committee from the Legislature met him and welcomed him again. At Dorchester he was welcomed some more. Besides, the railroad track was sprinkled, so that the dust might not irritate the Presidential nose.

From Dorchester the party proceeded in carriage over a well-sprinkled road to Roxbury, where the President was welcomed again. He finally reached the Revere House in Boston at 2.30 P.M. on the 17th, and, after an hour's rest, was taken over to the State House, where Governor George S. Boutwell delivered the final welcome himself.

This surfeit of welcome was too much for President Fillmore, and he was unable to ride in the procession on the third day of the jubilee, which was to be regretted, because the prettiest girl in all Boston had been selected to present him with a bouquet. She was so flustered that she could not distinguish

between the President and the humbler citizen who had been selected to ride in the Presidential carriage, but addressed the proxy as "Mr. President."

A tent had been spread on Boston Common, in which a dinner, at which thirty-six hundred sat down, was given. Fillmore could not eat a mouthful, but he did manage to attend long enough to make excuses and say adieu to his hosts, after which he started at once for Washington. Lord Elgin was less fortunate, for he had to listen to speeches until after dark. As no candles had been provided, since the dinner began at 3.30 P.M., the orators reluctantly knocked off when it grew too dark to see their victims.

While Massachusetts was so busy being proud of her railroads, her neighbors over in Maine were working hard to establish a connection with Montreal. No other State in the Union is so deeply indebted to one man for its railroad system as Maine. That one man's name is known wherever railroads are known. It is mentioned, perhaps, oftener than that of any other man among those who have been connected with railroads. This Napoleon of the rail was John Alfred Poor, whose family has given its name to that greatest of railroad classics, *Poor's Manual*.

Poor's First Locomotive.

John Alfred Poor, a country lawyer from 'way daown East, happened to be in Boston in April, 1834, when the first section of the Boston and Worcester Railroad was opened. His inborn Yankee curiosity led him to go to see the event. The first locomotive in New England was imported from England, as was also its engineer. The latter was fully conscious of the dignity and importance of his position.

When the engine—an iron monster weighing eight tons, without any such superfluities as bell, whistle, sand-box, headlight, pilot, trucks, cab, steam-gage, water-glass, springs, injector, brake, or jacket—responded to the opening of the throttle and actually began to move, Poor said that his hair actually stood on end, and he forgot to breathe.

The sight, so he often averred, made the most profound impression his mind ever received in the course of a busy life. He was twenty-six years old at the time—old enough to take an intelligent and efficient part in the task of providing his country with the transportation facilities it needed, and he took up the task at once.

From that day until he died at the age of sixty-three he devoted himself, heart and soul,

to the railroad. His reward consisted largely of the consciousness of a great duty well done, for he was not the kind of promoter who lines his pocket at the expense of others.

Maine was poor, and its people few, but a trifle like that could not discourage a man with the enthusiastic imagination and practical good sense of John Alfred Poor. In 1836, the first railroad in Maine, promoted by Poor, was opened from Bangor to Oldtown. That same year the Legislature provided for surveys to find the shortest and most practicable route from Belfast to Quebec, but nothing was done.

In 1839, a survey from Portland to Lake Champlain was authorized, but again nothing happened.

A Pioneer Promoter.

In 1843 Poor made public his plans for a railroad from Portland to Montreal, which now forms a part of the Grand Trunk, and for a second line from Portland to St. John and Halifax. For the next two years he went about addressing public meetings in behalf of his scheme, and he also traveled over the proposed route to Montreal. A company was organized, and surveys begun in 1844.

Boston had already started in the race for Montreal over three different routes, each of which had agents' out soliciting aid. Boston had all the advantages, for it had the most people and money, being the metropolis of New England, and one of the greatest cities on the continent.

Portland then had a population of only fifteen thousand, and all its earthly possessions wouldn't have amounted to five million dollars at a liberal appraisal. The proud Bostonians sneeringly referred to Portland as a small fishing town.

But no city could be considered weak or helpless which had so energetic a champion as Poor. Boston was having everything its own way, and its agents in Montreal had nearly succeeded in winning Canadian support, when Poor, hearing how things were going, made a forced journey in a sleigh through the wilderness from Portland to Montreal in the dead of winter, arriving in time to prevent the board of trade from adopting a resolution in favor of the Boston route.

Portland Wins Out.

Poor's next move was to arrange for a race by teams with mail from Portland and Boston to Montreal, as a practical demonstration of

the superiority of the Maine route. The race, which was run with mails from the same steamer, resulted in a victory for Portland by the very comfortable margin of twelve hours. That settled it with the Canadians, and they adopted the Portland route.

The Atlantic and St. Lawrence Railroad Company, which was organized to build the American end of the line, turned the first sod at Portland, July 4, 1846, while the Canadians began on their end soon after. There was the usual difference of opinion about the gage.

Poor, being fearful that the more powerful interests in Massachusetts might gobble his pet road, favored the 5-foot-6-inch gage proposed by A. E. Morton, the chief engineer, chiefly because it had been adopted as the British government standard in India, instead of 4 feet 10½ inches, the gage of the Massachusetts roads. The broad gage was accordingly adopted, and this led to the adoption of the same gage for the Great Western Railroad of Canada.

Railroad building in the wilderness is a costly luxury under any circumstances, and altogether beyond the means of a small fishing town. In 1849 the company was short of funds, and ruin seemed inevitable. Poor came to the rescue with an idea, which was all he had to give. On his advice, the contract for building the whole line was let to Black, Wood & Co., at a fancy price, as the only means of salvation. The plan worked, and the road, two hundred and forty-six miles long, was built, the first through train leaving Portland for Montreal July 15, 1853.

-To Shorten European Routes.

Poor, who in 1849 had bought the *American Railroad Journal*, founded in 1832, that he might the more effectively spread the railroad propaganda, and who in 1851 was elected president of the New York and Cumberland Railroad, redoubled his efforts in behalf of the line from Portland to Halifax, a trifle of eight hundred and thirty-five miles, in order to establish a short route from London to New York.

The completion of the Britannia tubular bridge over Menai Straits in 1850 enabled the

London and Northwestern to run trains through from London to Holyhead, whence steamers crossed to Dublin in three and a half hours. The Midland Railway of Ireland, by the summer of 1855, was built half-way from Dublin to Galway, from which port it was only two thousand miles to Halifax. Poor thought the time would come when steamers could cross between Galway and Halifax in five days, and from London to New York in seven days.

A company, under the imposing name of the European and North American Railway Company, was accordingly chartered in 1855. The road was opened for traffic in 1871 with a great celebration in which the President of the United States and the Governor-General of Canada took part.

Poor's Prediction.

It must be confessed, however, that, as part of an international route, the road has not been a conspicuous success. Anybody who is in a hurry to-day can beat Poor's estimated time from London to New York two full days.

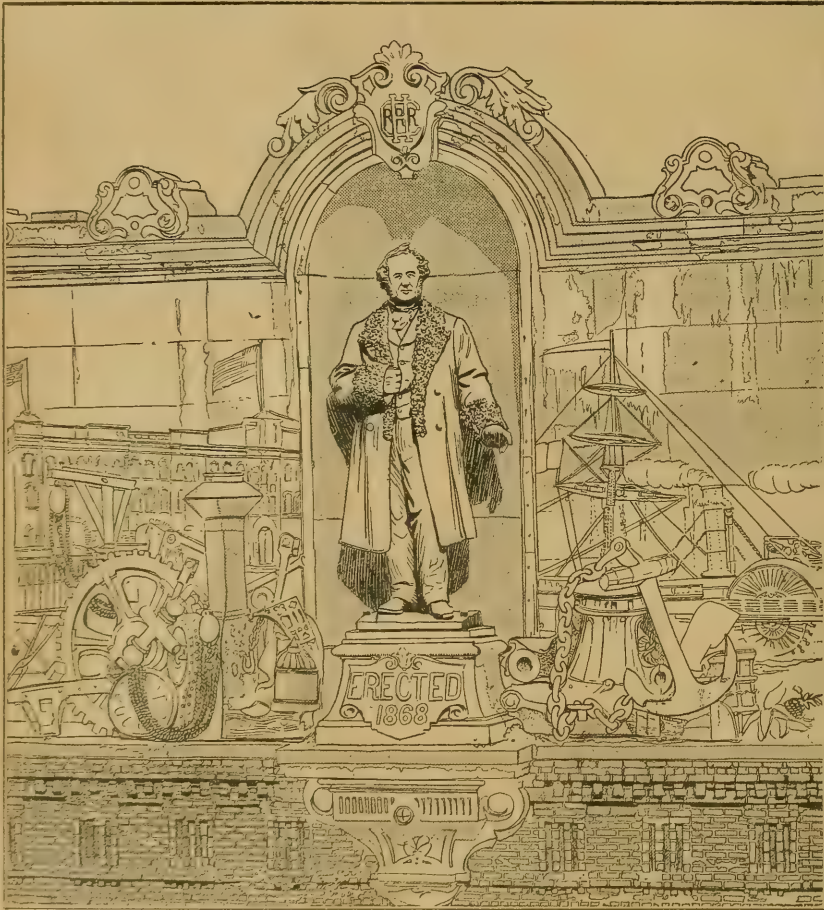
Poor did not fail very often, however. He had a better comprehension of the future possibilities of the railroad than most men of his day, as the following extract from a speech he made at Belfast, Maine, July 4, 1867, will prove:

"The coarser work of constructing the road-bed of railways is now understood, and we cannot expect any diminution in the cost of building it; but in the construction of the rolling-stock, in the quality of the superstructure, in economy of management, and in the supply of comforts to travelers, great changes are to take place.

"Wooden sleepers kyanized or preserved in creosote will outlast the iron rail, if not maintain a life equal to that of the steel rail; which is gradually taking the place of the iron rail, being more than five times as durable. Steel boilers for locomotives will be found superior to iron ones, and cars will be adjusted with conveniences, comforts, and luxuries unknown at this day, enabling travelers to cross the continent without fatigue, and affording to business men facilities for carrying on communication by letter or telegraph while the cars are in motion."

A little authority makes some men as overbearing as the high rail on a curve.—Casuistries of the Fourth Ass't Roadmaster.

Commodore Vanderbilt's Tribute to the Railroads.



OVER the front of the old New York Central freight station at Hudson and Laight Streets, New York City, where the long trains laden with merchandise for the metropolis, and cargoes for the big European liners at their North River docks close by, are unloaded, the impressive statue and bas-relief of bronze erected by Commodore Vanderbilt, in 1868, to mark the progress of the railroads as commerce builders, still stands, time-worn and weather-beaten. It is a prophetic vision of America's pioneer railroad builder of the days that were to come, when the bulk of the traffic of a great nation would travel over rails of steel from one end of the continent to the other. The artist has grasped the idea of the first president of the New York Central with the hand of a master, and the picture in bronze, part of which we are glad to reproduce for our readers, is one that is full of power and symbolism. The central figure is that of Commodore Vanderbilt himself. Along the cornice of the station, on both sides, stretch locomotives, steamboats, and other products of the brain and forge which have helped to stimulate trade and bring progress and prosperity.



"BUT MINE WAS BETTER! MINE WAS MY FLESH AND BLOOD!"

"MY FLESH AND BLOOD!"

BY J. R. STAFFORD.

When the President's Car Was Run onto Siding 13,
Unterburner Realized the Answer to His Question.

UNTERBURNER knew why he had been ordered to slip unnoticed through the yards to Hillis's private car. An investigation to ascertain why switchmen were always getting killed in Ruin Junction had been requested by the State Legislature. The president of the G. and T. had come in person to secure first-hand such thunder as he could to use against the railroad commissioners.

Though Unterburner considered an investigation all foolishness—he had run the switch engine in Ruin Junction yards every day for fourteen years—nevertheless he felt resentful as he plodded to the tryst. It was contemptible to go clandestinely about the defense of an honest position; so, in his own eyes his obedience was contemptible.

When at length he came to the car, which

was on siding 13 with the forward trucks against a barricade of bolted ties, secure against running off down the grade, he felt more disturbed than ever about his summons. Moreover, the appointment seemed more like that of thieves than of honest men, for in the gloom of the smoke and fading day, the car was as dark as Egypt. However, he swung up onto the platform, and after five minutes spent in rattling the knob and thumping the glass panel, he succeeded in getting some one to open the door a crack, and ask: "who?" in a guarded tone.

He was quickly commanded to enter. He stumbled forward into absolute darkness.

The door closed softly behind him. There was a click, and the whole interior of the car seemed to explode in a blaze of lights. A young man with a wide, flat mouth looked up from his stealthy manipulation of the

thumb-catch under the brass knob and smiling craftily, as if this were a vastly shrewd achievement, whispered:

"Everything is on the q. t., here. When you get ready to go just pull the door shut easy. I won't be here; I'll be watching outside."

Unterburner, wishing that he might wring the fellow's neck, turned the other way.

President Hillis, seated at a little flat desk, smiled up at him. Hillis was bulky—his features were coarse, and his eyes were dull. He suggested some ponderous slow monster apt to crush unwittingly. Yet, suddenly his eyes narrowed as if to shrewdly say: "Now I have you!"

He waved with surprising ease to a chair. Unterburner did not sit down. It made him uneasy to think of sitting in such a presence.

"Now," said Hillis, apparently heedless of the silent refusal, "what do you honestly think about the yards in Ruin Junction?"

There was an emphasis on "honestly" that disgusted the switchman. In retaliation for this and the whole dirty business, he would have lied if he could, but as fact was fact to him, and anything else impossible, he grudgingly answered:

"I think the yards are safe enough for men who don't get drunk and lose their heads. Of course, the sidin's all lay at grade, but ever'body knows that. They're paid to know that and keep it in mind. That's why wages in Ruin Junction are twenty per cent higher than they are in any other yard. But they don't keep it in mind. That's why they git killed. I know. I've been runnin' the switch engine here every day for fourteen year."

President Hillis squeezed his hands together with a rasping noise and chuckled silently. Bending his head forward and dropping his voice to a very low tone he said:

"Good! Mighty good, Unterburner! By the way, the division superintendent here has been telling me that you've put in all these years here so that the extra pay might enable you to send your boy through college. The son of such a father ought to have a chance. I'm going to see that he gets one."

Unterburner would have given his body for a sure foothold for his son, but he shrank from this apparent gratuity of the ruler of the G. and T. He felt himself flushing as if under an insult, and he muttered:

"I'm much obliged to ye, but I guess ye needn't bother."

Hillis laughed uneasily. He studied Unter-

burner's face for a long time. Finally he said as if quite anew: "You are going to tell the commissioners just what you told me a little bit ago was your honest opinion of the yards?"

"Yes, I shall tell them what I honestly think." Then, as it dawned upon him that the offer had been intended as a bribe, he clapped his greasy cap onto his white head and started for the door.

"Wait a minute. You are not going to let any one know you've been down here."

"No," he choked, in his resentment, "I shall not. It might be said that I was fixed. That shall not be said about me, even as a lie."

Without a hint of leave-taking, he slammed the door behind him. Never in all his life had he been so deeply offended.

On his way home, as he sat smoking his pipe on the back porch, and later, as he tossed in his bed, he kept thinking about the incident. He finally dismissed it by making up his mind that he had done the proper thing, but even as he slept he dreamed dreams of anger.

Next morning, he decided to change his views concerning the yards—if that were possible. All of that day, as he steamed up and down the sidings, he watched for anything that might enable him truthfully to assert:

"This yard is dangerous even for an experienced switchman."

This effort, however, brought him nothing more than bafflement. Though switchmen missed couplings as usual, and, as usual, cars started to run off down the inclines, the men, always out of harm's way, would jump nimbly up the ladders and put on the hand brakes.

Not even a bumper beam had the dust shaken off it that day. Somehow, this proof of his life-time convictions about the yards displeased him. When night came he was suspicious of some crookedness.

As they were leaving the roundhouse, he overheard Hogan and Miller talking about extra pay. He stopped to ask: "Who's drawin' extra pay an' who's givin' it?"

"Did ye not know, thot Prisdint Hillis's private car wor in the yarruds aal the noight?" Hogan demanded, with a broad grin, "Aan thot seein' it wad cost a pot av money should the commissioners rayquire the yarruds to be graded, his honor, Prisdint Hillis, is wisely spindin a few dollars to have the yarruds kept fray av accdints?"

Unterburner was more disturbed than ever. He walked swiftly away from the pair. He

despised the company of such silly fools who would take money from the hands of Hillis for anything else than honest labor.

All the way home, he tried to twist out of this revelation some argument that might arm him for attack on the yards, but the only thing he could see in it was just the thing he had always said and believed: that nothing would ever happen to switchmen if they only had something to make them keep their wits.

Realizing that his own statement had suggested to Hillis the plan of extra pay, his anger almost choked him. More than ever, he wanted to do something against that man. The rage that comes of helpless anger pos-

"My boss," the other replied.

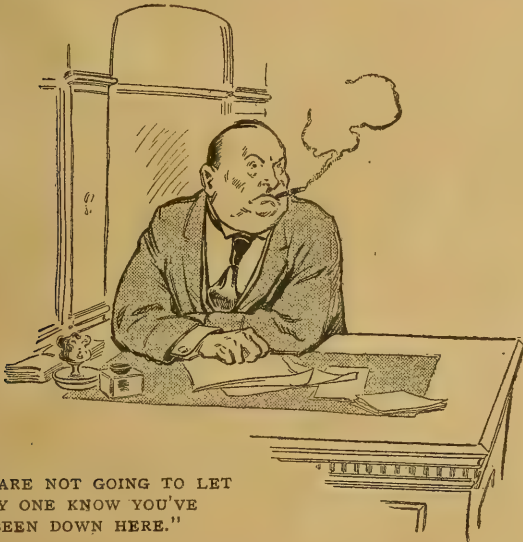
"And what if I do not let you?"

"Well, then I will have to go back."

"Will you get your pay just the same?"

"No, I am only a space writer. If I get the story and it's big enough to syndicate, I might make a hundred dollars. If I don't get it, I'll be out my time and expenses."

Unterburner thought it all over again. Finally he consented to the photographing and the interview, but when he had told his last story he still had some after-doubts and he asked: "You say that your boss sent you? Now, how did your boss happen to think of it?"



sessed him when he felt that all he could say about the yards would be just what Hillis would say.

The next day, as he sat brooding in his cab with an hour of idleness before him, he still saw himself between the devil and the deep sea, and he was anxious to get his mind onto anything else.

A smooth-looking young man came alongside the engine. He had a pad of paper in his pocket, a camera tripod under one arm.

"Is your name Unterburner?" he asked.

"Yes. What do you want o' me?"

"I am a newspaper man. I want to get your picture and then some of your experiences in the yards."

"Who sent you?" Unterburner thought the young man's ears lay too close to his head, but, thinking of his son who was about the age of this fellow, he would be kind to him if it were possible.

"Well, I can't say unless maybe he got it from President Hillis. I understand that President Hillis and the chief of the sheet I hang to are pretty close. Of course Hillis would want such a story. It might help a little with the railroad commissioners?"

"Then you must not print it." Unterburner objected quietly, not having had experience of the ways of young reporters. "I will not be talkin' to do that man any good."

The other, as if suddenly attracted by the sight of something in the gangway, edged into it and quickly down the steps to the ground.

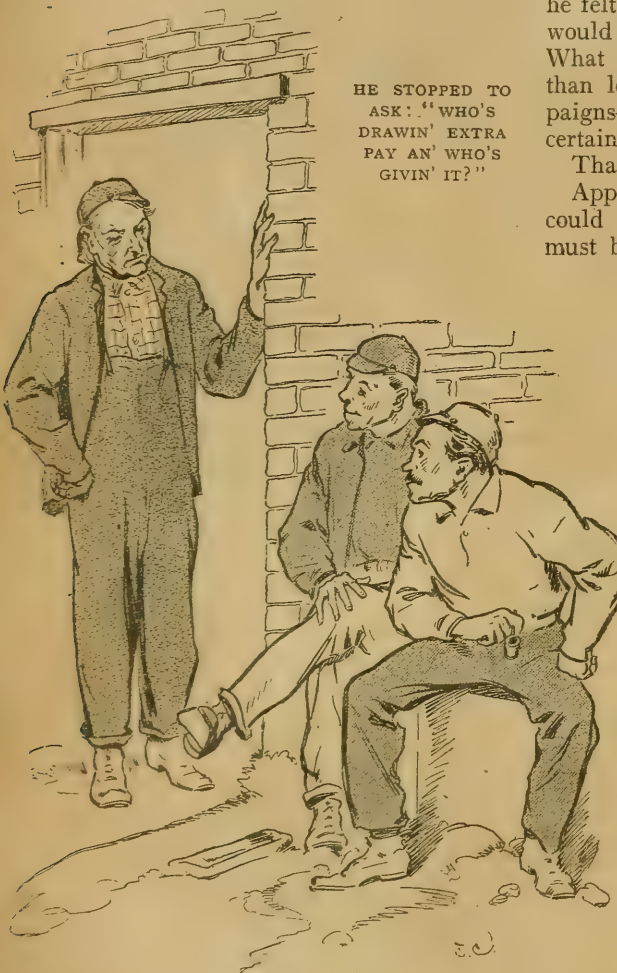
"Come back here!" the engineman threatened. "Come back here!"

The one on the ground was already in full flight alongside the switch.

Unterburner caught up a wrench, intending to knock the fellow down; but, being on

the right-hand side of the cab when he faced the rear, he could not swing his arm effectively. By the time he had "cat-a-cornered" through the gangway and down the steps, and poised himself on the cinders, the runner was a hundred yards away. Nevertheless, he drew back and hurled the spanner with all his might.

The instant the iron left his hand, 'he



HE STOPPED TO
ASK: "WHO'S
DRAWIN' EXTRA
PAY AN' WHO'S
GIVIN' IT?"

Slowly he made his way to where the wrench had fallen. More slowly he sauntered back to his cab. He was trying to discover a proper reason for the wish that it had been Hillis, and that Hillis could not have escaped. He knew that, for one wild moment, it would have filled him with keenest pleasure to have battered the president to death. As he had always had a great revulsion of murder, he was curious to know why he felt no revulsion at the thought of what he would have done had the chance offered. What had the official done? Nothing more than local politicians had done in the campaigns—offered him something for doing a certain thing.

That was all.

Apparently there was no difference—he could see no difference—yet he felt there must be a great one. He had been able to laugh at the ward-heelers, but the more he thought of Hillis the more tightly would his throat contract and his muscles jerk. Wondering at the significance of this, instinctively hating whatever it might be, he tried with all his might to drive it from his mind and heart.

For a couple of weeks he kept battling with himself and with his thoughts. He grew afraid, yet he knew his fear was only anger turned upon itself.

When the paper containing the reporter's story came, he pounced upon it, eager to see what it might develop in his brain.

The story, and the pictures illustrating it, covered a whole page. It was a good story. It made a hero of him. His wife, peering over his shoulder, read, and cried over the article.

But, instead of being pleased, he only experienced a great uneasiness. He kept asking himself, over and over again: "Now, what will come of this?" He knew it

would be something hateful to him—and for this he hated Hillis.

When he returned from work, a few evenings afterward, he found his son—a fine lad, with eyes full of fire and a frame like a gladiator—awaiting him. Instead of the customary delight at sight of the youngster, Unterburner trembled from head to feet. He knew just what the answer would be, but he did ask:

realized that he had nothing at all against that mere boy. Though he knew that the latter was far out of danger, he felt his knees quaking and cold sweat on his body.

What if he had killed the lad! Like a flash, it came over him that all this, like all the rest, was Hillis's work. At the thought, his knees stiffened, he felt the cold sweat no more. Instead, his breath was coming hard and his fists were clenching.

"Why did you come home?"

"Mostly because of that article in the Sunday supplement. It made me want to come home to work in the yards, so that you might have it easier. And—and I would like to learn to do what you've done."

Unterburner's lips, which were always tightly closed when he wasn't speaking, now shut until they showed only a thin line. His eyes, that were always wide because of the great strain of his work, the strain of watching where failure to see in time meant death, now stared wider than ever.

He was thinking. This is the significance of it all. As his thought ran back to that night in the private car when Hillis had mentioned a chance for the boy, and *he* had refused the offer, it came to him that Hillis had designed it just as it had fallen. With a mighty oath, he wheeled out of the house and, running blindly down through the yards, came at last to division headquarters.

The yard-master, into whose arms he blundered at the door, looked up and asked: "What's the matter with ye, Unterburner? What's happened?"

"My boy has come!" He choked over the statement as if the fact implied some terrible consequence. "He'll be down here to ask ye for a job! Ye must not give it to him!"

"All right," the other promised. "I'll not hire him—unless, of course, something should happen to maké me."

This was all Unterburner could ask, so he started for home. On the way he overtook Hogan.

At first the Irishman was unsociable; but at length he thawed enough to ask if the engineman had heard the news.

"My son came home," Unterburner replied, as if the incident were matter of public concern.

"Woosha! Phwat the divil do thot amount to? Th' sthory yiz had thim print in the paypers has caused the commission to lave be the invistigatin' av the yarruds. So the extra wages ended to-night."

Unterburner's heart thumped against his ribs. Things were coming fast now. He thought of his son, who had been strangely dragged into this net of circumstance, and he shivered.

But it was not a net of circumstance! It was the work of Hillis!

He panted under his fury.

When he reached the house, he could not bring himself to open the door. Retracing his steps into the yard, he walked up and

down, trying to think what it was that must surely be coming.

He could imagine nothing more terrible than that the boy should get work in the yards; but, as the boy was not a fool, this was not so terrible. He could not rid himself of his thoughts, and all night long he walked up and down the narrow yard.

By morning, however, he had made up his mind. Entering the house, he found the others astir. He said to them: "I shall quit work. I am going down now to throw up my job."

"Ho-ho!" the boy laughed delightedly. "I didn't have any hope of you taking my plan so readily. I will go down with you. Perhaps they will let me have your engine."

"You shall not! We are going to leave this place! We must get away from here at once!"

"Are you crazy?" his wife asked, her eyes popping from her head. "Where would we go? What would we do for a house? We cannot sell this one, so there would be no way of getting money to buy another. We could not rent this one, so there would be no money to pay rent anywhere else. Unterburner, if you had ever done such a thing before, I'd think you had been out all night carousing. Have you?"

"No," he retorted angrily. "You know better than that. We've got to leave here. That's all."

"Why?" they both asked at once with sudden emphasis.

Though he knew that he could not answer, though he knew full well that his attempt to answer would only seem foolish, he plunged, then rambled on. Somehow he could not say the one thing he really wished to say: "I hate Hillis!"

He could not say that, because he saw no good and honest reason for his hatred.

Then, as they stood, open-mouthed, looking at him, he felt the hair prickle on the back of his neck, and a kind of cold contraction of his scalp, for the thought had struck him that he was playing a part in this awful thing that must come to pass. A foolish part, just as he had been now playing, but a part necessary to be played.

With a mighty resolution, he sought to throw it off. He would be a man. He would assert his unshakable unconcern of the things that could not strike him unless he blundered in their way. So he smiled as best he could and said:

"I was only joking. I was worried and could not sleep last night. So I feel foolish



this morning. I will be all right after I get to work."

Even as he said this, he felt his heart leap and pound, and he knew that this intention was but another step in the way of the thing that would come to pass.

His wife, mistaking the reason of his agitation, smiled as she observed: "I knew you would go back to work."

This frightened him more than ever.

After breakfast, he hurried to the roundhouse. The climax was a certainty! At the end of every heart-checking cessation of his faculties, it seemed to him that his strength for the crisis failed. He would think of Hillis as the author of it all, and then he would grow gigantic in his will and power to slay. But then, after each panting struggle, as in his mind he had already done the deed, he would fall to wondering why he

waited to destroy the man, whereupon the conviction always came that when the time did come he would be unable to play his part.

Why should he want the man killed? There was no reason—not the sign of a reason. At this he would seem to sink and sink; but, just as he was groveling to helplessness, something would whisper, "There will be a reason," and again he would tower and press his way with titanic stride.

Thus pausing, then running, stopping again, and bounding on, he came late to the roundhouse—but, late as he was, he was earlier than the switching-crew.

Automatically he backed his engine out onto the house track, and whistled the call for hands. Automatically, too, he saw the men come straggling along, their eyes red, their feet dragging. Somehow he seemed to know, as from years back, that they had been on a drunk because of the cutting off of the extra pay. He knew what must follow this.

It came twenty minutes latter. Donneley, his hands too nervous to unlock the main-line switch in time, missed opening it. The brakes would not hold back enough. The switch-engine, with Miller and Hogan and Campbell sitting on its buffer-beam, dashed into the end of a long string of loaded box cars. Miller and Hogan jumped, but Campbell fell under the wheels.

Then, like the march of things that had been coming to these moments for ten thousand years, he saw Campbell's body removed and carried over to the platform of the gloomy red station; a baggage-truck run out; the stained old sheet of gray canvas, tucked and carefully concealing; and, on the gray board underneath the truck and the canvas, he knew that the little brown puddles were growing drop by drop.

As that dark pageantry passed, another darkly significant took its place. The white-faced switchmen stood for a moment at the foot of the stairs leading up to the division superintendent's office. One slowly ascended. Presently he reappeared at the door. Behind him, Unterburner saw his own son.

Wild agony wrenched the heart-strings of the engineer. He would stop this accursed progress of inordinate sacrifice. But even in his resolution he knew that he would fail.

When they came alongside the engine he could only say to the boy, "Addicks promised me that he wouldn't hire you."

"Yes," the boy laughed, "but I asked the

superintendent about it and he said he had been ordered by President Hillis not long ago to let me have a job when there was a vacancy."

Unterburner struggled like a man bound. Feebly he threatened, "I'll quit the engine."

"Yiz will thin turn the ingen over to the b'y," Hogan observed. "I had that frum Addicks jist a minute ago, in case yiz tuk a notion to quit. It sames he has also been hob-nobbin wid the prisidint. It wor the prisidint's order."

Unterburner felt himself falling a thousand miles. His strength was going. Suddenly as he realized his unmanning weakness, he hurled it away. He would be himself. He must be himself. He would conquer it all in spite of all. What was there to unman him in the fact that his son was working by his side? The boy was no fool like other men. Like other men, he had eyes and ears and arms and legs and strength; and the wit to use them all when they were needed.

But even as he opened the throttle, there came to him for the first time in his life doubt of his theory in the practise of other men. Why had he been able to live through fourteen years in the yards when the other nearest record was only eighteen months, and that one had ended in a death?

He puzzled over it, but in some way he missed the connection. Then the needs of the work withdrew him. There were thirty loaded cars to be backed in from siding 14 onto 13 and then to the top of 13, which was half a mile away. As he nursed his steam, the question kept coming back and back again. Suddenly the notion seized him that the answer of this would be inevitable, because within that answer lay the hidden meaning of many things. A

great calmness possessed him; the patience to wait a century.

Suddenly a yell rose from the front of the engine. It thrilled him through and through. He looked and saw Hogan and Miller piling off the buffer-beam on his side. Looking on past the switch into siding 13 he saw a single empty had been left

up there the night before, now broken loose and running wildly down to the end of his train.

His heart seemed tearing itself from his breast. It was not because he knew that his boy was sitting in the middle of the buffer-beam, confident of the father in the cab; not because any harm might come to the boy; not anything of that sort.

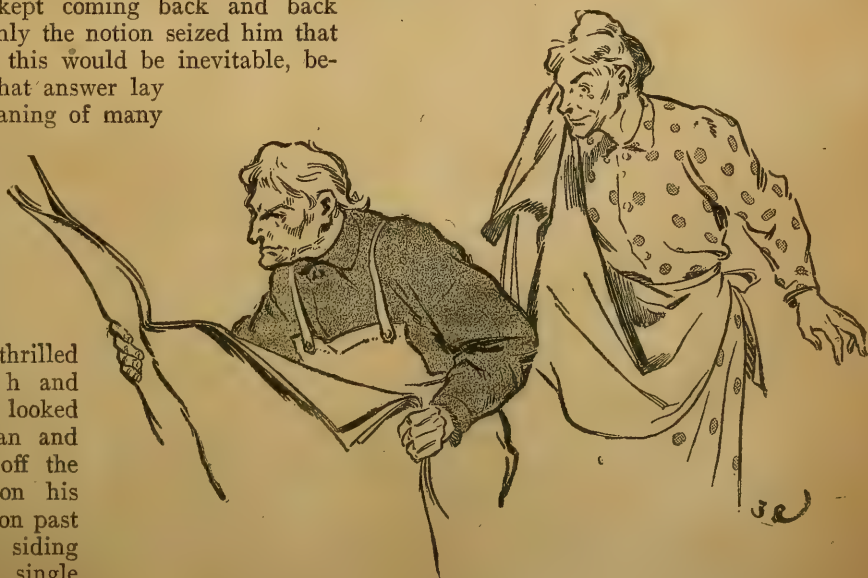
His frenzy was the realization of the awful truth that he had failed to see when he should have seen. He flung himself upon the reversing lever, while his left hand, shooting out, played like a nozzle of fingers on the throttle-turn.

He was in reverse. He started to open the throttle. The throttle stuck. He felt the train check, pause, and then start back—but this would not be enough.

He wrenched at the throttle with both hands. He could not open it. It would not open.

There came the long volleying crash of bumpers pounding against each other down a grade. It came with the crackling crash of accelerating fire from automatic guns. Unterburner reached for the air-valve to the train. He missed it. He set the engine-brakes. The drivers locked. From the head end came the roar of an exploding gun. Then fell a silence like the grave.

He did not need Hogan's gibberish for it. He knew what had happened on the buffer-beam. It had happened in the sequence of the seeds of destiny. He did not even get down out of the cab. Sitting at his window,



IT WAS A GOOD STORY. IT MADE A HERO OF HIM.

he saw once more the pageantry of Ruin Junction.

Before his eyes there passed in solemn review the first fatality he had witnessed in the yards, the next, the next, the next, and so on down through the years—down through the years, until this moment, when his son, the last, lay dead!

He knew the answer of his question now.

"It is but a matter of time until men and equipment fail."

Like the flash of the sun at morning, he saw that failure in Ruin Junction yards meant death for the man who failed.

Through the blinding horror of that truth something bright and glittering swept by. For an instant, he did not comprehend what it was. He thought it was something supernatural; but, as his vision focused, he saw a burnished engine on the main track slowing down. Behind the engine rolled a blind-drawn private car. The special stopped dead still. He felt a vaster strength than he had ever felt in the air of battles.

A man swung down from the engine on the main line. He ran over to Unterburner's crew. He shouted to them, "President Hillis's private car is to go down to the foot of this siding, as usual! It's to lie there all day! So you fellows be careful! He's wore out with a six-day fight with the railroad commission! Be careful! He's asleep!"

Unterburner saw the special glide smoothly down to a cross-switch leading to 13. Deftly the car was cut off, held, and then allowed to slip alone into the channel of the rails that ended far away in a barricade of rails.

Then, so calmly that they could not com-

prehend him, he asked his men: "Have you got the boy's body out?"

Hogan nodded.

"Close the switch after me when I get in."

The heat had gone out of the throttle-stem now. The throttle opened. He pushed his forty cars on up the way until his engine, too, was on 13. Reversing, he started back.

"Phwat the divil mane yiz? Did yiz not jist now hear it said we wor to kape aff this sidin'!"

But Unterburner, straining at the throttle to open to the widest, only flung back this wild answer:

"I'm goin' to finish my work in Ruin Junction yards."

Down that steep siding swept the heavy engine, under full head, with the weight of flying tons behind. It leaped like a thing gone mad to slay. Unterburner, his white hair streaming in the wind, his lips like a knife-edge, his wide eyes widened to their whites, danced upon the jostling coal-heap of his tender.

As he danced, he yelled mad phrases at the helpless car below:

"You man-trap!" "High wages was the bait in yours!" "But mine was better! Mine could never fail! Mine was my flesh and blood!"

Then came the crash of tender on car, of car on bolted barricade of ties. Through the débris that shot up from where the president's car had stood, the switch-engine, heaving upward, reared and toppled back upon the wreck, and the smoke rose like a black pall from the finished work of Ruin Junction's master-hand.

THE OPERATOR AT JAMESTOWN.

(Written at the time of the Great Flood.)

Message 1.

THE torrent poured across the plain,
Lapped torrents from the hills o'erhead;
"It looks as though 'twere going to rain,"
The laughing operator said.
And then she wired—she loved her joke—
"That reservoir may soon be broke,
You'd better all get out your arks";
They laughed forsooth to hear her larks.

Message 2.

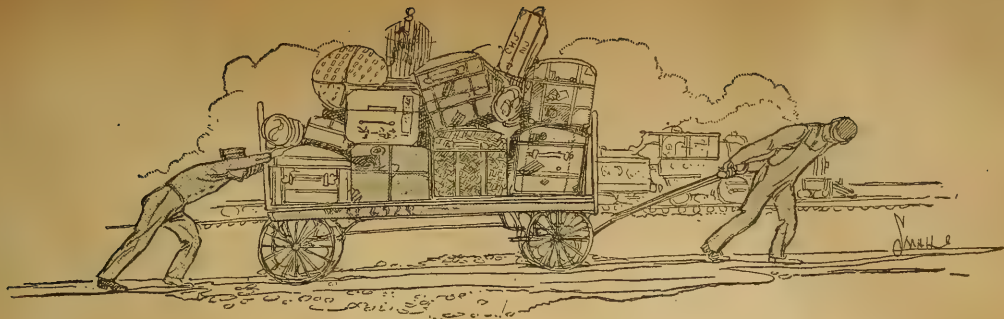
"There is a flood, and here's your proof—
We're telegraphing from the roof;

Flee for your lives; the muddy foam
Engulfs already many a home;
The water's at our window-sills—
The dam has broken through the hills."

Message 3.

"This is my last message." A hush
Along the wire; a sudden rush
Of waters. Help! Too late—they've swept
Where two brave women dying wept,
And weeping died, if they might save
The prey of Conemaugh's wild wave.

New York World.



Observations of a Country Station-Agent.

BY J. E. SMITH.

No. 30.—From "Plug" to President; or, How Henry, the Rube Youth, by Patient Plodding and Perseverance, Rose from Poverty to a Private Car.



THIS is a bit of biography, written at the request of nobody and without any particular purpose. It was suggested by reading a little story in a newspaper of a railroad man who had gone up to prominence, well known as an organizer and as an executive who handles the destiny of a network of railroads.

He made a trip to the old homestead in the country to visit his mother.

This little incident of a son's affection is nothing within itself. Every dutiful son—whether prominent, prosperous, or otherwise—visits his mother now and then.

But this particular man is high up. He does not follow the straggling line of variegated humanity out of the smoker, as most of us do when we visit home. He has his private car, with polished brass and observation end. His coming is a matter of circumstance and flutter—another instance wherein "honey-boy comes home to mama with the bacon."

But the item of interest the newspaper finds in the visit is this: His private car side-tracks at a little country station; he is driven four miles directly toward nowhere, and

brings up at a small country house, half hidden behind the luxury of shrubs and vines protected by a faithful guard of patriarchal trees.

This man of steel, iron, and electricity is back home!

He came from a farm. That's the point. He went all the way from spring water to the Chamber of Commerce and the Stock Exchange. That is a mighty distance. It makes us pause and take notice and write of it as one of the startling possibilities of American life.

It is hard to conceive how a boy brought up in the companionship of a span of mules and a Holstein cow, who treads down one corn-row and up another, can ever arrive at a commanding position in the affairs of his country. Yet, when he does so, every one is proud to speak of it and point to the humble surroundings of his childhood.

Among our Presidents we have had one who was an expert rail-splitter, one who divided his time between the farm and a tannery, and another who personally conducted a mule along the tow-path of a canal.

One summer, after the cinch-bug had ruined the wheat and the drought had fin-

ished the corn and two shotes had died of the cholera, the hero of this story turned his youthful face on agriculture and found a job on the section at a dollar-ten per day.

Then, after a long session of tie tamping, he straightened up, wiped the sweat from his face, and noticed the operator sitting in the depot office with both feet on the table and not even fanning himself.

Many a weary and exhausted youth, taking note of two feet on a table, has at once heeded the beckoning finger of destiny, thrown aside the tools of manual labor, and hurried to the telegraph-office. There, as from a cocoon, he issues forth in due time a fledgling, and lights in a tower with a mandolin, a red necktie, and balloon pants, care-free, and forgetful of all the toil that has gone before, and justifying the conclusion that there are better jobs than just hard work.

This particular boy from the farm went out and talked with his mother.

Somehow, working on the section did not appeal to him. Of course, he could see his way, by long and faithful service, of becoming section-boss, but he worked with such energy and faithfulness that he was afraid of putting a crimp in his spine, and he did not want to knot up his anatomy even to become a section-boss.

So he consulted his mother.

Being a faithful biographer, I am anxious, like all biographers who have gone before, to lay stress on this all-important fact—he consulted his mother.

The narrative of every great man contains that paragraph about the dutiful and obedient son and the wisdom and foresight of the mother. Where she directs and advises, and he listens to her. It doesn't matter how much of this is exactly correct—it reads well. All other great men have done this, and it shall be so in this instance. So once again—he consults his mother.

I do not know why great men in their youth never consult their fathers. The biographer sees to it that the old man does not muss up the picture by injecting his mattress whiskers into the color scheme. Father always remains in the background. He hustles for the provender, and gets no farther front than the rear railing.

Now, there are various reasons for a boy consulting his mother. Affection is the one that makes the best reading. In this case, however, it was because mother alone was the exalted keeper of the royal sock. She had it hid somewhere between the cabbage cave and the attic. It contained the family treas-

ure. Son was not onto the combination. Oh, piffle! This almost spoils a good story.

Coming back to strong and effective lines—he consulted his mother.

"Mother," said he, "I've talked to the agent at the depot, and he says if I want to learn telegraphy and depot work he'll let me come in there and he'll teach me for fifty dollars."

"How much money will you have from your work on the section, Henry?" asked mother.

"Twenty-five dollars," answered Henry.

"How do you know you'll get a job after you're through?" asked mother.

You see, mother had dealt with the huckster-wagon man and itinerant peddlers long enough to have her wits about her.

"He says there's no trouble at all about that," answered the son. "Why, ma, do you know what they make every month?"

Ma shook her head.

"Some of them get as high as forty-five dollars a month."

"Mercy me!" exclaimed mother. "You could save a lot of money on them wages. But, Henry, you've got to be sure of a job. How do you know if you pay him fifty dollars right on the start he'll do anything for you? Henry, you've got to be careful with money. You can't run any risks."

After other consultations between mother and son, and after further negotiations with the agent at the depot, the matter of son's apprenticeship was arranged. Henry was to pay five dollars a month for five months and a final lump sum of twenty-five dollars when he landed his first job.

Mother guaranteed the faithful payment.

Son boarded at home. When he could use a horse, he rode; otherwise, he walked the four miles daily, taking his lunch with him.

In the fall it was arranged that Henry was to have a new suit of clothes out of the turkey money, to cost as much as eight dollars and forty cents. In this way he commenced a railroad career that ended in a private car with ebony porters and a French chef.

In the ordinary pursuit of life, when a boy goes in to learn a trade or business he is known as an apprentice or helper, and there is some dignity and standing to his position.

A boy learning telegraphy is despised and is an outcast from the beginning. He is known as a "plug." When he gets far enough along to venture on the wire with a few wild dots and dashes he becomes a "ham."

In the plug or early stages he sweeps out

the depot, carries the mail, looks after the switch-lamps, lugs in the coal, and reaches the point where he actually talks with the brakeman of the local, which lightens all labor and makes happy the day.

The "plug" makes rapid headway the first two or three months. He learns to send.



HE RODE BACK AND FORTH TO THE STATION
MORNING AND EVENING.

This is comparatively easy. But the reverse operation of hearing a combination of dots and dashes and reducing them to writing is the difficult thing, and ordinarily requires a year or more of careful practise.

A "plug" can soon send, but he cannot receive. Learning to read it and put it down is slow work, and requires some perseverance and runs into the months.

If a "plug" chances to converse with an old operator about this time he is usually cheered along and encouraged by being told that he, the operator, learned it in three months, and had a good job just four months

to the day from the day he commenced learning.

A-wise "plug" will not heed these fairy stories.

There are no three, four, or five month operators. They have nothing but pinfeathers at that period. They cannot deliver the goods, and, if placed, it is either at some point where there are no goods to deliver or they are rankly unfit for the service required.

This word of encouragement is passed along to the "plug." It's a year's work. Do

not take the four or five month prodigy seriously. Make note of that. When an operator boasts of his aptitude and quickness to arrive, he hasn't gone much after he arrived. That is the proof of the pudding.

The speediest proposition in telegraphy is the wiry, red-headed, freckled-faced Irish lad taken in the wild and without a frill in any other direction. He learns it faster, and he becomes the lightning-gear, ten-words-behind "phenom."

This is not a joke. It is a very sincere tribute.

By a certain native, nimble-wittedness, he

has the same natural aptitude for telegraphing that his father had for police duty.

Henry worked hard. He had to dig it all out and treasure it away. He consumed the full year learning telegraphy, but, in the meantime, he learned a little more.

The agent gradually shifted the office-work to Henry's broad country shoulders, and Henry emerged with a little knowledge of billing, expressing, office accounts, and car reports.

This little stock of information got him a job as agent at a very small station, at a very small salary. A year later, they changed agents at Henry's home village, and Henry got the place.

He came back at a salary of forty-five dollars per month—the princely figure that had stirred his youthful imagination and kindled his mother's fondest hopes.

Henry was happy and envied. A neighbor dropped in to congratulate the parents, and "lowed as how Henry was a powerful peart boy, and that he'd make his mark, and needn't be surprised if Henry wasn't township trustee or somethin', if they lived long enough ter see it."

Henry himself had neither ambition nor thought of the future.

With one lightning bound he had arrived. The coveted job at home and the forty-five dollars per month were his. The world contained nothing more.

He boarded at home, and rode horseback to and from the station every morning and evening.

When a flayed and frazzle-nerved captain of this strenuous day collapses he is hurried off to a city, where a specialist turns on an X-ray or some other contrivance for exploration and torture, but imposing enough in hocus-pocus and legerdemain to extract a fee of fifty dollars, finds the victim's nerves shattered and that he is suffering from malnutrition and various digestive disorders consequent thereto, and brought about by certain dollar-chasing habits which he knows the patient will not relinquish.

The specialist has but little in his pharmacoposia that will do any good, so he prescribes daily horseback riding of ten miles. This brings back the sparkle and healthy bloom so fully and freely described in the breakfast-food ads.

Horseback-riding is a fashionable prescription. It is high-class, exclusive, and shows that the patient is under treatment of a specialist of renown and can pay the price.

Out in the country the old home doctor

tells the patient to "quit living like a durned fool," prescribes a little calomel and soda, and charges fifty cents.

Thus without intention, knowledge, or need, in full adolescence and flower of youth, Henry took on horseback-riding and built up a constitution that was an asset for many years to come. The old-fashioned country diet, and hand-churned, unadulterated buttermilk aided and abetted in this.

Many years later, in the hurry and worry of a different life, Henry paid over fifty dollars and consulted a specialist.

He prescribed horseback-riding and real country buttermilk.

There were not a great many things connected with the duties of a station-agent in a country town almost a generation ago to sharpen the wit or develop the intellect. So, that in pointing with pride to Henry's career, and preluding it with, "His first experience was as station-agent at Sulphur Springs," we are not stating anything that has any particular bearing on the career or final outcome.

To a lay member who does not know, it sounds well to say: "He began as station-agent at a small country town, or that his first work was on a section, and he went up and work until he became president of the road."

That reads well in the biography. Its chief purpose is to fire the imagination and stimulate the hopes of the lowly.

Henry hadn't much to do. He had two locals and four passenger-trains each week-day. He had a few reports to make up, and outside of these few duties he led a lazy and indolent life. Looking into it closely, it is difficult to see wherein it is in any way abetting or tributary to the high position of the chief executive of the road.

However, it must be written in his favor that he did well what little there was to do.

Henry had time enough to read Josephus, Plutarch, and the "Life of the Saints," but he was not much of a reader. He had leisure enough to have enabled him to have entered the list of perpetual-motion inventors, or to have tackled the problem of a dirigible airship, but he was not mechanically inclined.

He just sat around on the job.

At the end of the month he wrote up the monthly letter and comparative statement of the business of the station. He was glad to report that there were three cars of sawdust in sight to be shipped to Kokomo for the Johnson ice-house, and there might be a car of potatoes for Indianapolis, but could not say certain until next month. Ticket sales



LEMUEL SPENT THE SUMMER DAYS PITCHING HORSESHOES AGAINST ALL COMERS AND AVOIDING HARD WORK ON ACCOUNT OF BRINGING ON "THEM SUDDENT DIZZY SPELLS."

showed a little falling off, being \$76 this month against \$91 the corresponding month a year ago. The explanation of this was that fewer people were traveling.

It is to Henry's credit that he wrote out these comparative statements and explanatory letters very minutely. He spelled circumstance with an "s," but in time he overcame that.

He did other things worthy of note.

There was one Lemuel Spudd, whose wife was a successful gardener and chicken-raiser. Lemuel himself was a pensioner for three months' service, having gone as far as Nashville and ruined a magnificent constitution by crossing the Ohio River in a fog.

Lemuel spent the summer days pitching horseshoes against all comers and avoiding hard work on account of bringing on "them suddent dizzy spells."

Lemuel's reputation extended back into the far townships. When Henry, the new operator, broke into the game, Lem toyed with him, and bestowed upon him the usual taunts and contempt of a champion to a novice. But the new operator had a steady nerve and a good eye, and began pressing Lemuel for honors. The sporting blood of the village was up, and the final contest drew the population of the place to the spot.

Henry broke the world's record. In four throws he pitched four "ringers." The best Lemuel had ever done was three "ringers" and one "leaner."

From that day Lemuel was a dethroned idol. The laurels of the horseshoe championship were transferred to the new operator.

For a long time Lemuel was sour and sore, and remained at home with an alleged attack of the old army complaint.

Then Henry edged into the game of croquet that for seasons had been monopolized by Gene Steele, Jim Mock, and Zac Sample. In a short time he got so he could plunk them across the lot with deadly aim, squeeze through wickets on the narrowest margins, and place the balls like magic. The old veterans quarreled with him, complained of his manner of play, and found fault with his maneuvers and technique; but one by one Henry vanquished them all and became the village champion.

Then he stood up, chesty and defiant, and searched the horizon with an Alexandrian eye.

He spotted Sycamore Corner, a near-by village, triumphant and boasting over its baseball club. Henry organized the Spartans to give battle.

He gathered recruits from the general store,

the blacksmith shop, and the farms. Feeling ran high. Sycamore Corner sent over word that they were calmly waiting, but what they would do to Sulphur Springs would be a sufficiency.

Henry was captain and catcher.

Sycamore Corner won the first game easily, but the second went to Sulphur Springs. The third and deciding contest took place on the Fourth of July.

Henry's husky aggregation was clad in overalls. Some of them were barefooted. The reputation of their native village was at stake. The sneers of triumph and the haughty contempt of the enemy rankled in every bosom. Sycamore Corner must be humiliated.

Humankind is much alike now, then, and everywhere. The wildest "bug" of Cubville or Giant Town has nothing in way of partisan intensity and effusive or abusive boisterousness not possessed by the militant followers of those two village nines in that far-away day.

The game itself was one of those magnificent cross-road exhibitions of the national sport.

There were a few fights on the line by the over-zealous and ultra-enthusiastic which added spice to the afternoon's entertainment, but in no way affected the issue.

The last half of the last inning found Sulphur Springs at bat, with the score of 37 to 34 in favor of Sycamore Corner.

Two men were out, but the bases were filled.

Henry came to bat.

The cries and shrieks of howling dervishes filled the air, and, while the enemy bellowed in derision, Henry missed two good ones, and the umpire bawled out above the din:

"Two strikes!"

Then Henry showed his metal. He arose to the occasion. In the crisis and pinch he steadied, and the next instant there was the sharp crack of the bat, and the ball sailed off until it faded away in the distant haze of the summer day.

Henry went the circuit with three ahead of him, and Sulphur Springs had won—38 to 37!

Thus in sport triumphant, Henry arose to the highest possible distinction in his native town.

The next day he scrubbed out the depot. It is only the truly great that can lay aside the laurel wreath at the very hour of triumph and return to the humble duties of life.

Lemuel Spudd nosed about.

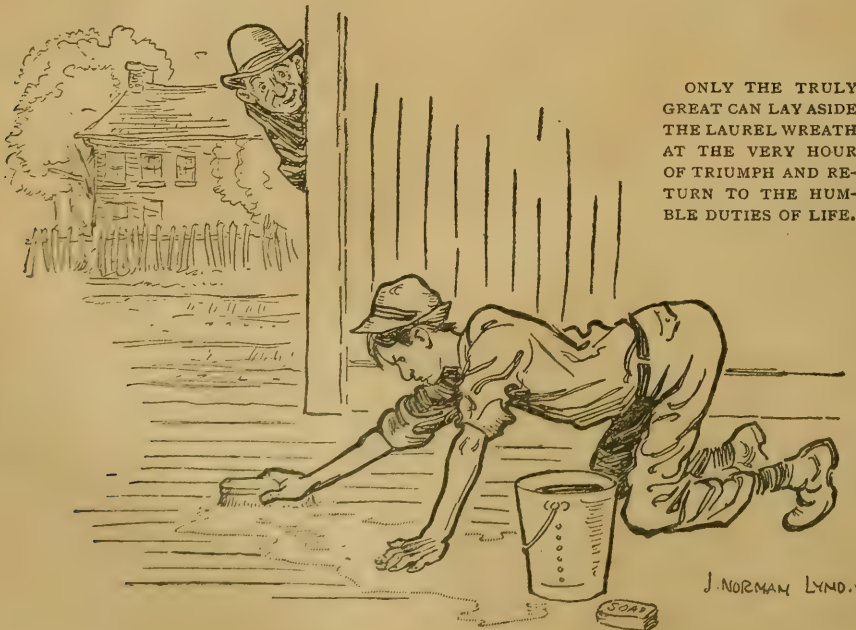
"Goin' to be an inspection?" he asked.

"Why do you want to know?" replied Henry.

"I see you're scrubbin' out. That's a purty good sign the big fellers air a comin' along."

"Well, if they do come," said Henry, "you make yourself scarce. If they want to ask you about anything, I'll send for you."

Spudd grinned in a silly manner and edged



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J. NORMAN LIND.

away a little, but beat no full retreat.

The entire population of a small town always consider the scrubbing of the depot the sign of an official visit next day. Every one lays close and holds himself in readiness.

A strange whistle or an engine with a single coach brings to the depot a swarm of the "nibby" and the idle curious that hang around the edge and intrude with an ignorant impudence.

They want to hear every word. They hope the superintendent will crush and humiliate the agent. They are eager for something to sizzle, and they do not want to miss any of it.

You may be sure an agent is delighted to be surrounded by a delegation of his fellow-townsmen on these occasions. Not so much that they are often barefooted, bareheaded, and wonder-eyed, or that he needs the moral support of great numbers, but that they take such a keen interest in the affairs of his office and lend a certain yokel color to the perspective, so that the passing official instinctively places the agent as one of them.

In the winter Henry organized the Sulphur Springs cornet band—twenty members.

By spring they could play "No. 10" (a certain waltz) and "The Palms."

They may not have had the elegance and finish of Arthur Pryor, or the stirring cadence of John Philip Sousa, but, believe me, they sure did make the noise.

Henry played the tuba. He could send the hoarse notes reverberating half-way out home and back. He had six-cylinder, 80-h.-p. lungs, and a reserve force not mentioned in the catalogue.

So much for horseback-riding, country buttermilk, baseball, and tuba-playing. He was being developed into a "Lil Artha' Johnson."



LEM HEARD THE SUPERINTENDENT TELL HENRY THAT HE HAD GROWN SOME.

If any reader has grown impatient and fretful following the byways of this narrative to know wherein there is anything about this country-station experience suggesting a fitness, or in any way preparatory to the highest duties in railroading, he now has the answer.

Ordinarily, a young man removed from the direct observation of the general officers and stationed at some isolated spot, or on some detached duty, must do something very much out of the ordinary, showing heroism, presence of mind, or some unusual aptitude to call attention to himself, or he is forgotten.

One day Lemuel Spudd, obeying an unerring instinct, hustled to the depot just as the superintendent's special pulled in.

Lem did not want to miss a word that passed, but he wanted to absorb it all casually and unconcernedly. He armed himself with a long pine stick and a sharp knife, and commenced whittling in an aimless and preoccupied manner and edged in.

Lem heard the superintendent tell Henry that he had grown some since he had come

to Sulphur Springs. The surroundings must agree with him.

Lem Heard the superintendent tell Henry something in return, but the only word he was certain of was—"buttermilk."

Lem crowded a little closer, and was disgusted to note that the superintendent was pleased, and that he asked Henry about "buttermilk" and narrated some "buttermilk" experience of former days.

This kind of talk did not please Lem. He wanted to hear Henry criticized and chastised, so he could hurry over to the blacksmith-shop and the general-store and spread the news that "Henry had got his."

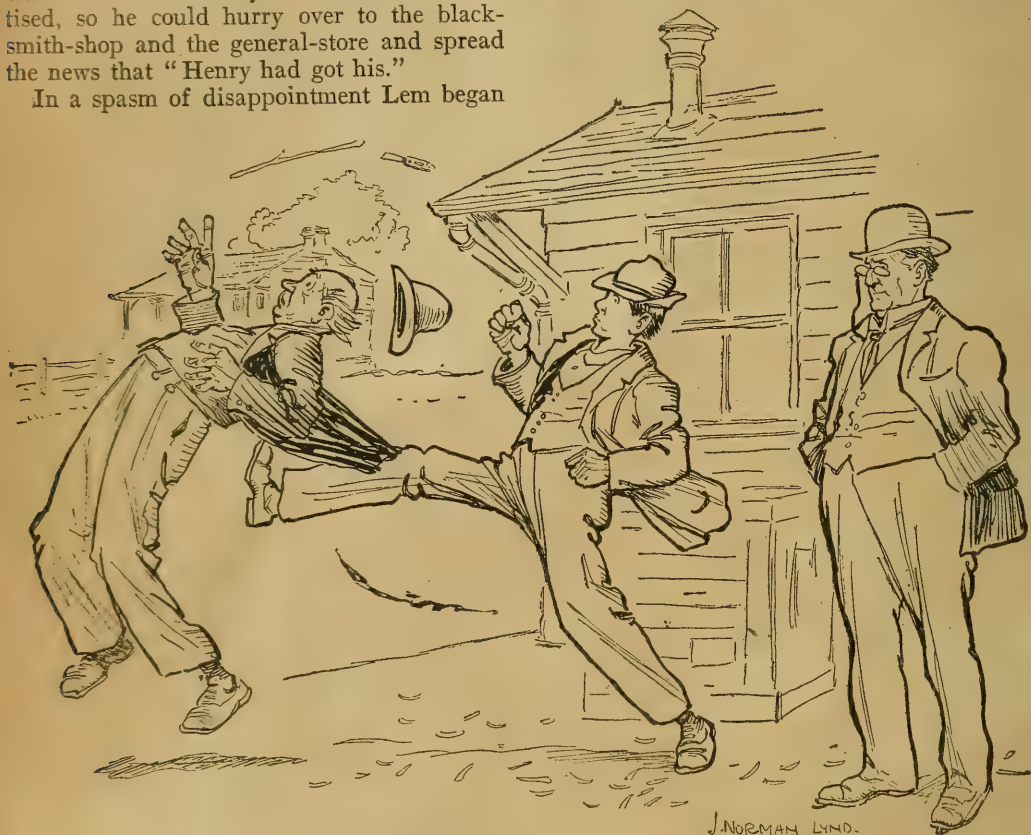
In a spasm of disappointment Lem began

"That fellow's a loafer," he explained. "It made me mad the way he tried to butt in and the way he was littering up this place. I—"

"Not a word," said the superintendent, greatly pleased; "don't forget that jug," and the special moved on.

A few days later Henry sent in a gallon jug of fresh, spring-cooled buttermilk, tagged to the superintendent.

It was the real old-fashioned article—



HENRY OBEYED A LIGHTNING IMPULSE.

whittling more desperately. Long shavings fell thick and fast on the cleanly-swept platform and under the official's feet in a sort of protest against the character of the conversation.

It all happened in an instant.

Henry obeyed a lightning impulse. He grasped the "nibby" and offending Lemuel by the nape of the neck, and by a dexterous yank and with two or three well-directed kicks he landed him clear of the premises.

The next minute Henry tried to apologize to the superintendent.

neither overripe nor underdone—uncontaminated by butter coloring, preservative, or refrigerator taints.

It called for more.

One day a strange package accompanied the jug. It was a country ham.

When a man is offended for years by the saltpeter, the liquid smoke, and the forced chemical curing of the packing-house product, a country ham is like manna from heaven.

A country ham is not an article of commerce; and when one finds its way to the larder of a city man, it is either because he

has found the combination or because "Allah is good." For the country ham is where the shote is picked in the very pink, where the corn flavor is accentuated by the mild smoke of real hickory bark, where it is hand-rubbed and cured without forcing—and where the order always repeats, "Thank you for a little more."

For a long time there had been some trouble in the yards at night. The road found it difficult to get a competent man to handle the situation, which required the qualities of quick decision, some nerve, and character.

The superintendent decided on some changes. He reached for Henry.

He took him without experience or training, and put him in the yard. Henry learned the game, and made good. From that point he went on and up until he became the great-

est of mazoookums, with "rings on his fingers and bells on his toes."

Now, the point I am struggling to is this: Why should the biography of this great rail-roader lay emphasis on the commencement of Henry's career as a station-agent in a country village? What has that got to do with the case?

Why not start the biography this way:

"While employed in an humble position he passed the buttermilk along, and at the psychological moment he administered three swift kicks to one Lemuel Spudd, an intruder."

Honest, now, what caused the superintendent to call on the agent at Sulphur Springs to take a fighting job? And which gave Henry his opportunity?

A true biographer should not overlook trifles.

Old Chris Adelman.

**An Alton Veteran Whose Name Has Stood for Faithfulness and Efficiency
for Nearly Half a Century.**

BY S. H. BROWN.



CHRS ADELMAN is the oldest road engineer in point of service on the Chicago and Alton. Incidentally, his running-mate at the other end of the "Slater Accommodation," out of Kansas City—known everywhere as the "Red Hummer"—is John G. Alexander, the youngest conductor on the western division.

In the truest sense of the word, such men as Adelman are representative Americans, for they are built of those steadfast, calm, competent qualities that have made this country what it is. A typical American, Adelman is also a typical product of that vast railroad industry which Americans have done more than any other people to develop on gigantic, picturesque lines.

Adelman has been in the employ of the Chicago and Alton for forty-six years, and if confidence, competence, and activity count for anything, he is still a young man, though years and experience have put their marks on his hair and face.



CHRIS ADELMAN.

He joined the road as a brakeman in 1863, in the stirring times of the Civil War. Two years later he was promoted to fireman, and in 1869 he went to the right side of a freight-engine. Ten years later he was promoted to a passenger-engine; so that for nearly thirty years he has borne the chief responsibility for many hundreds of lives.

In 1879 the Alton secured its first entry over its own line into Kansas City, and Adelman pulled the first regular Alton train into the budding metropolis—a train of nine cars, including a diner, hauled by engine No. 145, weighing thirty-four tons.

One of the chief characteristics of the famous veteran is his dry humor, always kindly, but always to the point; and it is common belief that he has brought more firemen to a realizing sense of what he expected of them, with half a dozen words, than most engineers have done with the most accomplished and unsacred vocabulary at their command.

On one trip the green fireman that he had was a most enthusiastic shoveler. The sound of the popping valve seemed to be music to him, and when the injectors were working overtime he was happy. The value of coal was a thing unheard of by him, and the only place he liked to see it was in the fire-box; so he did his best to put the whole tender-load of it there as quickly as possible.

At last the engineer became impatient. The indicator showed top pressure, and they were bowling along finely, when another burst of industry seized the fireman, and, grabbing his shovel, he was about to swing a scoopful onto the fire, when Adelman's voice came to him:

"Say, if you don't like to see that coal, throw some of it out of the gangway."

A different case was that of the fireman who thought that the duty of making steam was quite secondary to an artistic appreciation of the landscape. They were in the middle of a run, and the fireman had just climbed on his box-seat, and, with a far-away look in his soulful eyes, was admiring the beauteous scenery.

The indicator hovered hesitatingly at twenty pounds under "pop," and showed a downward tendency. In other words, the engine was, technically, "cold." Suddenly the fire-

man came back to earth, and, with a praiseworthy desire to be helpful, he drew in his head and shouted:

"Say, Chris, there's somethin' poundin' down there."

"So?" queried the engineer. "Guess it must be icicles."

Just as much to the point was his remark to a fireman of the same school, who, having displayed no living interest in his fire after leaving Kansas City until they were approaching the grade for Independence, was aroused from his reverie by Adelman's voice inquiring:

"I've been working twenty minutes now. When do you expect to begin?" He began.

But not all the stories of Adelman are humorous. There have been times in his railroad career when the man of steel has shown up back of that every-day faithfulness, and when death and duty have ridden side by side on bright rails smeared with blood.

One such occasion was when, owing to the carelessness of a brakeman, a siding-switch had been left closed, and Adelman's engine crashed down the siding into a standing freight at Larrabee. Larrabee was a blind-siding, and Adelman was not required to either stop or slow down.

The crash was terrific. The fireman of the passenger-train was burned almost to a cinder in his own fire. The men in the freight-engine were instantly killed, a number of passengers were injured, and the engines were locked in one solid mass of twisted rods and plates.

Adelman was thrown many feet, and when he was unearthed from a mass of debris one leg was broken in three places and he was battered and bruised all over. And then, with his strength fast ebbing in the agony of his hurts, he gasped feebly:

"Look after the others; I'm all right."

There is no melodrama there. There is no mere "copy" for a sensational newspaper report. There is an actual man with torn, burned flesh and broken limbs, suffering to the point of death more agony than death as he gasps:

"Look after the others; I'm all right."


Yes, he's all right!



AN HOUR IN THE PIT.

BY ROBERT FULKERSON HOFFMAN.

Dan Lamy Sees the Beauty of Railroading,
but He Once Longed for Something Safer.

OOD morning, brother; good morning! I hope you are rejoicing in the beautiful uplift of this delightful morning, these glorious mountains, this matchless blue sky, this sweet, stirring air! They make our task in life a beautiful one, do they not?"

Dan Lamy was not rejoicing in the uplift to any noticeable degree just at the moment, but he was very far from sad. He had acquired a wholesome sort of philosophy that carried him over the rough places of life with very little jolt, and sometimes enabled him to hitch his mental go-cart to a passing star and clamber in for a moment before it spilled him back to earth again.

So, Dan reached out between the driving-wheels of the big locomotive, which was shutting out his view of the mountains, the blue sky, and much of the sweet, stirring air; caught the low, slanting main-rod with his good right hand, and dragged himself out on his back from beneath the engine where he had been silently working.

Then, while his inverted, upturned face looked up into the friendly and enthusiastic face of the young minister who had spoken, Dan answered:

"Yes, sir. I'll allow they do—but I've seen the day when I'd have traded for something safer. There's times when a fellow feels like Bendy Striker said that day: 'For a nice, safe, clean job, gi' me preachin'.'"

He turned over on the ground with that, and rose stiffly to his feet, between the purring bulk of the waiting engine and the eager, upstanding figure of the young minister.

The sweet, sharp air swept down from the sun-tipped crest of Pelaya Mountain, rippling and wimpling the new-range grasses upon the nearer slopes. It toyed familiarly with the long frock of the young

minister's coat and waved it like a banner from his stalwart legs. It sent the little column of smoke swirling and doubling upward in restless curlings from the locomotive's stack; and it caught up gently Lamy's empty blue blouse sleeve and waved it as in a mute, belated farewell to the good left arm that was gone.

The call of destiny had brought the young minister from his distant home on the plains newly to tend the little flock of Pelaya. Filled with a boundless enthusiasm for his work in a world which he had thus far found a smiling place, he had come rejoicing in his own perfect physical being and in a rather broad view of the surface indications of life as he saw it.

He soon discovered an unsuspected depth beneath the every-day manifestations of Pelaya's methodical, virile life. He had confessed to himself in the quiet of his modest study that there were times when he had felt much as if he were an overeager puppy caught tugging futilely at the free end of a very deep and firm root.

Therefore, being a man of sound judgment and right thinking, he had started out upon the premise that a good shepherd must follow his flock to the field, no less than cuddle it in the field.

The call of the despatcher—which is the frequent call of destiny for men who follow the rail—had brought the hard-run express engine from its stall in the roundhouse to the cross-over track at the station too hurriedly for the completion of Dan Lamy's regular routine.

Dan had followed, and so it had come about that the minister met an unknown member of his newly acquired flock, and Dan Lamy met the new minister whom he had not previously seen.

Just for the moment the young man of the

cloth regarded Dan's impassive face narrowly, while the suspicion that he was being laughed at brought a flush to his face. But when Lamy's far gaze came back from the gold and white of the mountain-top, across the swelling green of the slopes, and finally to the busy shops and the waiting engine before him, his faded blue eyes looked squarely into the sparkling black eyes of the minister, and he said:

"Yes, sir. It's certainly fine to have a part in all this!"

"Yes, glorious!" said the minister.

Each knew that the other had arrived on a mutual ground of respect.

"And Striker," said the minister easily. "He was your fireman? You are the engineer of this great machine?"

"Who, me?" asked Lamy.

In turn, he had suddenly come to question whether he was not being laughed at by this self-poised stranger; but one searching look dispelled the doubt. He answered:

"Oh, no! I'm only a wiper. They took her away from me in the roundhouse for a special that's coming. I have to finish her here. No," he continued as he resumed his wiping of the under parts, "I'm no engineer. I was meaning to be once, a while back; but after I lost the arm—why, that was all off, you know. Being an engineer, I mean," he explained with painful exactness.

No, Bendy Striker was a machinist on the pits in the backshop, that time when he made them remarks about preachin' and that. I was his helper, and we were working on this same engine. I reckon she's been rebuilt, or overhauled, two or three times since then for heavy repairs. Seems to get better every time, too. Bendy Striker's improved a lot, likewise. He's roundhouse foreman over there now. There he goes now. Just crossing the turn-table. See him?" said Lamy in keen excitement.

He watched furtively between the tops of the engine frames and the belly of the boiler until a stalwart figure of a man had stalked into the open end door of the roundhouse and disappeared.

"Oh, he's a keen one!" laughed Lamy, as he resumed his puttering with a wisp of cotton-waste.

"There ain't no better. He's watching me, and he'll give me holy sailors if I don't get this engine done in time. Bendy wants everything looking its best; and he gets it, you bet!

"But the backshop's the place!" Dan an-

nounced with a wise shake of the head as he attacked his wiping with zeal renewed.

"Ever been over there?" he asked with an earnest upward glance, while he picked up his kit and moved to the next driving-wheel ahead.

"No, but I have been intending to go," replied the minister, following Lamy's lead.

"You'll see the big cranes lifting and carrying the engines like children in arms, and you'll see other things as fine and wonderful.

"But me! I always go and have a look at the old drop-table where we took the wheels out of them and put them in again, in the days when I was helping Bendy.

"You see how it's done? You've stripped your engine and took the wheels out of her, long before, we'll say. The boys have been swarming over her on the erecting pit for a month, like bees storing honey in a dead mountain-tree.

"Then comes a day when she's all snug and proud and shining with blue jacket and paint. But she's still setting squat on her blocking like a duck froze fast in the ice. You jack her up a bit at the front and run in her truck. You lift her a bit at the rear and slip a dummy pair of wheels under her.

"The big doors swing open at the head of the pit. The cable of the transfer hooks onto her, and she moves out slowly, like the bright sun had thawed that duck out of the ice and she's trying her legs for a start.

"The transfer snorts and grinds along, with her setting all quiet aboard, until she stops and begins moving backward onto the drop-table—say three pits farther along in the shop again.

"And there you are! She's standing with her front track blocked on the solid rails at the head of the drop-table, and her make-believe, dummy pair standing far in on the drop-table. Behind her stands the boys, all ready and anxious, with her three pairs of big, new-turned driving-wheels, and fresh-fitted boxes hanging on the axles.

"Do you see?" queried Lamy anxiously.

"I see," said the minister quietly.

"Then you haul out the two big, fork-headed ratchet-jacks—one on each edge of the drop-pit—and set them solid and good. You lift the big steel crossgirder and drop it into the forks of the jackheads, and slip the big girder and all ahead till it's under her deck iron.

"You swing to on the jack-levers till she rests heavy on the cross-girder. You yank out from under her the dummy pair and roll them clear away.

"There she stands! Big as a house, and bridged, all clear and free above the drop-table!"

"You see?"

"I see," said the minister.

"All well, you say," continued Dan proudly, "and somebody waves a hand; somebody throws the big lever, and the drop-table starts sinking down upon the gears and screws under the floor. With it go the boys and the new drivers, you see, because you must be there to steer the boxes into the pedestals when she comes creeping up again."

"Me and Bendy had the back pair on this day I'm telling you about. It was just like every other such day, until the table had got low enough to let the drivers roll under the girder. Two pairs had been rolled ahead, and the boys were stooping and blocking them with bits of wood to keep them from rolling back."

"Bendy and me were just sighting our pair for its place on the rails—ahead a little and then back a little—while we kept looking up at the black tons of her hanging on the girder about eleven feet above us."

"Bendy's always set great store by Sunday and his family, and I guess his mind's kind of running on it then—that being a Saturday morning. Anyway, while we're rolling and wedging below and sighting and peering up into the half-dark above, Bendy's a singing a little piece that I never forgot, and likely never will. It went:

Then, gather the fam-bly round you Sunday
morn-ing,

Let the ba-bies roll a-round upon the flo-or.

"Kind of jerky and laughing-like it went, that way, with Bendy prying and straining at the wheels:

Bu-ut I give to you the time-ly warn-ing:

You must ne-ver—

"Then it came!

"All sudden, it was, with a sharp snap like the breaking of a big, dry limb in the wind."

"One of the ratchet-jacks broke off short in the thread, just above the jack-body. The girder end struck a clip of fire off the broken jack-head, with the engine toppling down close after. The girder skidded forward and tore out another streak of fire from the steel rim of the drop-pit. Then it cleared the edge, all in a wink, with the engine falling close after."

"The rear of her came crashing down complete into the pit, with Bendy stooping and singing, as I say, by our pair."

"I hit him a cruel, hard punch back of the ear—'twas all I'd time to think or do—and knocked him half under the driving-axle of our pair. He fell, in the midst of his song, and his legs stretched out to the wall of the pit beyond the shelter of the wheel."

"Down she crashed, with a dust of bricks and mortar from the ripped pit walls, and the shivering noise of her was close and loud as a thunderclap in May on Pelaya's top."

"She shivered her grates on the rim of our wheel pair and sent the pieces raining down around us. She cupped her empty fire-box down over the wheel till it bent the axle and drove the wheels splintering off the rails and sunk them in the floor of the table."

"Then it all got quiet as death. We heard the running feet only of hundreds in the shop above. Bendy laid there, all quiet, and I laid still beside him for a while, sort of thinking at it. My arm felt numblike, and there wasn't anything to do—anyhow, not just then."

"The pit was plugged complete from above, with the engine crumpled down on us at the rear, and the rest of the boys trapped in the free space ahead. They were safe enough, for the while, but me and Bendy's in a bad fix."

"They began shouting are we hurt; and everybody begins hollering from above, are we hurt?"

"I answered as best I could," said Lamy, as he picked up his kit and rounded the pilot into the bright sunshine on the other side."

"Yes?" said the minister, as he followed."

"Bendy sort of roused up at that," continued Dan, "and first thing he does is finish his singing."

He sings, like he's about half jagged:

Ne—Ne-ver ta-ke the horse-shoe fr-om the
do-or.

"Then he lets out a yell that scares me full alive. They said, after, that you could hear it clean down to the end of the straight track through the shop. That's a big yell. And he kept it up, fighting to tear his legs loose from the broken plank and iron that was holding him; me up and battling to hold him down, for fear he'd bleed too free; the rest of them from above tearing things away and rigging a derrick to set us free."

"I thought I was there a week—they say it was only an hour—with Bendy yelling and fighting and singing, before my strength went, and I called to them that I couldn't hold his busted leg shut no longer. 'They must come help hold him,' I yelled."

"The road doctor got there by then, and he come sliding down the ladder they'd set, far as he could, with his little black box in his hand.

"But he couldn't get to us. Nope! Just scrooched down close among the twisted mess and peeked in first.

"Then he hollered at Bendy:

"Hey, Striker! Now you lie quiet! Cuddle down now, or I'll come in there and— Do you hear, Bendy?' he says, as savage as anything; but, of course I knew he couldn't get in.

"And Bendy takes a wild look at him through the engine-frame and quiets down like a lamb; just bleating away, dull, at that song again.

"With that, the doctor tells me to hunt out Bendy's pulse and keep hold of it.

"Now, count it when I raise my hand,' he says, 'and keep on a counting till I say: 'There!''

"He takes out his watch, and when I'm all ready and Bendy's a-singing, peaceable, he jerks up his hand and says: 'Count!'

"I go to counting to myself till he says: 'There!'

"Eighty,' says I, and he pockets his watch, satisfied.

"Then he hollers up to them to bring him a dipper of water. Pretty soon, he shoves in to me, through the mess of bars and stuff, a little shiny squirt with a drop of water hanging on the end of it, and he whispers:

"Jab that into the skin along his back and push the stopper!"

"I did. Bendy let out a terrible yell, and I had hard wrestling for mebbe half a minute again. Then he began to quiet down and, in a second more he seems to get clearer in his mind. He raises his head and says:

"Hollo, Dan! What are we waiting on? Why don't she go up?"

"That's all right, Bendy,' says the doctor, before I can answer any.

"We'll run her up, in a minute. You're all right—and a good job it's no worse!' he adds, mebbe louder than he intended.

"Anyway, Bendy seems to hear it all and he says, just before he went to sleep, and not being altogether clear in his head:

"Yes, this job's all right. But, for a nice—clean—safe job—gi' me—preachin'."

"And,' says I, without thinking much: 'Me too, Bendy!'

"Bendy's always held that I done him proud that day, but I guess most anybody would have done as much. Wouldn't they?"

"Oh, yes. They got us out all right, after a while. Bendy always wanted that I should go on and finish learning the trade with him. But, I never could stand working around that drop-pit afterwards, and if anybody lets out a sudden yell, or drops something heavy near by, I have to start and run a little. Can't help it. So, Bendy gave me this job of wiping when he took the round-house. I like it fine!

"What are you selling, brother?" queried Lamy as he advanced his box-seat to the rear driving wheel and looked with satisfaction at that last item in his task.

"Selling?" asked the brother.

"I am not selling anything," he continued thoughtfully. "I have been engaged in giving away some things which I thought were of great value. Now, I hope I may be able to offer a better quality soon."

"Oh, samples?" questioned Lamy, in the fullness of candor and friendliness.

"Why, yes, in a way," replied the visitor.

"I am the new minister," he said, while he reached for Dan's lone hand and closed upon it with a strong and honest clasp.

"Oh," said Dan, helplessly. "I didn't know. Mebbe I wouldn't have told you that about Bendy. Not just like that."

"I shall always be very glad that you did not know," replied the minister.

"But you'll like Bendy Striker," Dan assured him with evident anxiety.

"Say! There he comes now! He's after me, and he'll give me holy sailor if I don't finish this engine!" chuckled Lamy.

He bent again zealously to his task while the minister turned to search the strong, smiling face of the man who was bearing down upon them from across the tracks.

"Go on over and meet him," advised Lamy, turning for a brief glance.

"You'll like Bendy! But, he'll give me 'you-know,' if he gets here before I'm through!"

The minister went. That was the opening that let the new minister deep into the big, warm heart of Pelava.

A turning flange gathers no rust. Work is the finest polisher.—Sayings of the Super.

THE STEELED CONSCIENCE.

BY GEORGE ALLAN ENGLAND.


In the Whirl of Torture, Where a Man
Is Broken in Body, Mind, and Soul.

SYNOPSIS OF PREVIOUS CHAPTERS.

JOHN GRAHAM, a young artist, discovers among his dead father's effects a diary which proves that his former guardian, a wealthy lawyer named Simon Dill, has robbed himself and his mother who has since died, of a large fortune accruing from a gold-mine in which Dill and Graham, senior, were once partners. Although engaged to Agnes Dill, the lawyer's daughter, Graham goes to Dill's office, presents his proofs and brands him as a criminal, demanding the money which his father has left him in trust. Dill finally pretends that he is about to make restitution, but by a sudden strategy fires his revolver, grapples with his ward, and, when the police rush in, hands Graham over to them as a robber and assassin. He conceals the diary, which is the sole proof of his own guilt. It is a case of one man's word against another's. Dill, who has dabbled in politics, manages to have Graham prosecuted before a judge whom he put in office. The artist is found guilty and sentenced to five years' imprisonment.

CHAPTER VII.

The Old Gray Wolf Again.

EVERAL weeks after he had settled down into the routine of bunk and bars, tin plate and bare-board table, and had assumed his allotted work as an operator in the prison telephone-exchange, Dill came to see him. Stone and Barnard had both visited him the Sunday before, and had, as fully as the limited time permitted, gone over the case with him, outlining also a plan they had to present a petition to the board of pardons and the Governor.

Graham had only smiled and shaken his head, for already he had come to realize, even more fully than they, the prime mover in every such affair—pull. They had left him calm and quiet, even cheerful, as though dominated by some strange, far thought. Frankly, neither of them had quite understood him; and what we cannot understand is apt to make us a bit uneasy. They had gone away discouraged.

At Dill's appearance in the outer office, that May afternoon, authority scraped and bowed. Not every day did a long buff touring-car roll up over the cobbles from City

Square and stop in Chapman Street before the harsh granite-and-steel monument of ugliness that serves the Commonwealth as a trap to hold those foolish or weak enough to be caught. The prison felt itself honored by that car and by the eminent philanthropist, who had written more than one article on "How Shall We Treat Our Unfortunates?"

The trusty in charge of the office—a "lifer" who owed his special privileges to years of consistent spying and "pigging" on his fellow captives—hastened to dip pen in ink for Dill to sign the register, and then to creak back the door leading into the corridor which gives access to the rotunda.

Dill, precise and smiling, holding his top hat over his broadclothed arm, stepped out into the great, round, stone-paved place, from which, on all sides, radiate the wings. All about it, from floor to roof, a matter of forty or fifty feet, rises a huge circle of steel bars; and in the center, whence all the tiers of cells, story upon story, can be plainly seen, stands the watchman's desk.

A monster cage, the rotunda, with an eye at the exact middle—a spider-web, with a spider ever keen-sighted for any move of the sad, gray flies caught in its spreading meshes.

Dill nodded familiarly to the watchman, who bowed servilely to him.

Began in the October Railroad Man's Magazine. Single copies, 10 cents.

"Number twenty-seven hundred and four?" queried the visitor.

The guard consulted a book, called a warder, and sent him for the man, who now no longer had a name, but merely three figures and a zero to express his personality.

"Will yez take a seat, sir?" asked he, pointing at the circle of plain wooden chairs that surrounded the rotunda.

Dill thanked him, but remained standing. He walked slowly about the space, blinking up with a show of interest at the ranges of cells beyond the cage. As a prominent authority on prison-reform, and a writer on the problems of how society should best protect itself against the "lower classes," it behooved him to simulate observation during this, his first, visit to the penitentiary in over six years.

But his real thoughts were far from the prison. He was remembering still the look on Graham's face when sentence had been imposed—a quiet, inscrutable look which had often since recurred to his mind—a look which had caused him the sensation that all of us feel when, at the Zoo, we wonder just what might happen if the lion's cage door should chance to open.

Dill had had more than one bad quarter of an hour trying to keep that persistent thought out of his brain. He still looked forward to fifteen, maybe twenty or more, years of social prominence, public admiration, enjoyment of life. Perhaps, if Graham should prove embarrassing, he might once more be put away as easily as the first time; perhaps not. Perhaps something might happen. Dill shuddered slightly.

"By all means, I must—ah—either intimidate the beggar, or, better still, mollify him. Best of all, point out to him his only chance for rehabilitation—through reform, eh?" he concluded, with a new sense of self-confidence. His powers of judgment, of word-building, of heaping fact on fact, of buttressing all with impregnable logic had, he knew, few rivals.

"Once let me talk to him, just talk," thought he, "and I wager I can change his views."

The clang of metal on metal, behind him, brought him round on his rubber heel. Dill always went shod with rubber; he loved noiseless walking. More than once it had helped him see things, hear things of value. He faced round. Two men stood just inside the big barred door that led from the cell-space into the cage of the rotunda. One was the blue-dressed warder; the other, Graham.

For a minute Dill's eyes narrowed. His heart swelled with almost irrepressible exultation at sight of the young fellow, the one-time menace, the potential danger, standing there, utterly within the grip of the law, absolutely shorn of power, caged, crippled in all his possibilities, helpless.

Graham remained passive, waiting for the warder to point him out a chair. This the warder did; and as Dill advanced across the open space, treading as softly as ever a sparrow-hunting cat stepped, he sat down, crossed one gray-clad leg over the other, and waited.

Dill noted the great change that had come over him—the close-cropped hair, revealing now the unusual height and depth of skull; the yellowing of the skin, which already showed the beginnings of prison pallor, due to miserable food, to lack of exercise, sunshine, and air; the thinning out of the cheeks, the neck, the corded hands; the deepening of the eye-sockets; the singular new light in the blue eyes.

Leaner though Graham had become, however, Dill saw that his shoulders were still straight and strong, and that the throat which showed through the opening of the coarse shirt was like a round, firm column as it rose to the close-shaven, prominent chin. Even the fact that the prisoner's nails were carefully trimmed and cared for did not escape Dill's eye as he drew near and sat down by Graham in the chair which the warder drew into place for him.

A minute the two men looked at each other. No word was spoken on either side. Dill blinked and fumbled at his glasses, while Graham's gaze was level and as steady as steel. The lawyer, disconcerted, set his tall hat down on the pavement, blew his nose with a flourish, and cleared his throat.

"My—ah—my young friend," he began, then stopped short. There was something in Graham's look that he instinctively felt made that line of approach, useful, perhaps, in other cases, quite too baldly absurd. Dill sniffed, fingered his watch-fob, and tried again. The warder, with a curious glance, moved away.

"You might as well know," said Dill, positively faced down by Graham's silence and the steady, searching eyes, "know—ah—that—that is, you understand. I have felt it my duty to come out here this afternoon, at considerable loss of time, and trouble, to—to see you.

"Duty, ah. A great word, duty. We all have a duty to perform to our fellow man, even to the most misguided, the most erring.

A duty to society; a duty to our neighbor. The unfortunate circumstances leading up to—to your present situation were—hm-m-m!—were forced upon you—upon me, I mean, upon me, were forced upon me in a manner which I need not rehearse here.

"How much I regret them all, only my Maker knows. He—ah—reads every heart and searches every soul. I trust that you will prove penitent and—and truly chastened, and that this retirement from the world will give you ample time to reconsider your ways. To take counsel with your inner self. To grow in patience and humility. To reform, radically and truly reform, so that when you—that is, so that there will never be any further cause to—ah—I hope you understand me?"

He paused, a little out of breath, and with his fine linen handkerchief nervously dabbed at his forehead. His hope was that Graham would make some answer, come out with some request, some reproach, best of all, some threat; for then, he felt, he could immediately take the whip-hand of the situation. Once he could get a man to talking, to arguing, he knew how deftly he could entangle him, how cleverly put him in the wrong.

Many and many a client, betrayed and plundered, he had dealt with thus, in jail or out; but now he seemed to feel a force different from anything he had ever known, superior to his, baffling, redoubtable.

The sweat started in reality, though the prison air was chilly and dank. He shifted his feet uneasily and sat there a moment, almost forgetting what he had come there to say, unable to lay tongue to a word. A cell door jarred and grated. Rough-shod feet clattered somewhere on iron. A footstep sounded on the rotunda.

Dill looked up. Another visitor had entered—a sturdy, big-chested man, with a face lined by suffering, with eyes which had been dimmed by the bitterest tears in this sad world, the tears of parenthood. The visitor sat down, a few chairs distant, and waited. Dill, revived to action, began again:

"Coming down to practical fact," said he, lowering his voice and leaning a bit nearer to Graham, "you must realize how terribly this unfortunate affair has broken me. To be forced, actually forced—ah—to take action against a former ward of mine, against the son of an old friend—I trust you grasp my meaning?"

"The situation is quite intolerable, now, my boy. I have decided to leave the city, the country, in fact. To retire from prac-

tise for a while, permanently, it may be. To take my—er—my daughter, you understand, and go abroad, where I can secure for her cultural and matrimonial prospects far superior to any in America. Very agreeable climate and conditions of life, you know, on the Riviera. Cannes, or Nice, or some one of the towns along the Mediterranean will no doubt suit us exactly.

"Orange-groves, olive-orchards, sea-bathing, social amenities, and all that. Rather a contrast, eh, with this?" he added, an undertone of bitter malice running through his voice like the red thread in British naval rope, hidden, yet real.

"Bless my soul, what a contrast! The way of the transgressor is hard, my boy; virtue is—is—ahem! As I was saying," he hurried on, lowering his eyes before the silent, cynical look of Graham, "as I was about to remark, undoubtedly my daughter will be materially benefited by residence abroad.

"The painful memories of this affair will be soon obliterated. She has been much distressed—er—that is, she was at first, but—after all the facts came out—not from me, you understand, not from me, but in the public press, then she seemed to become more reconciled. Much more so. Yes, indeed. To forget. Entirely so. I—we—ah—that is, a trip abroad will doubtless effect a complete change in her sentiments. I trust you comprehend me fully, and make up your mind to relinquish all—that is to say—"

He stopped again. Though Graham had not spoken, yet something had come into the young man's face, an expression, a gleam of light in his eyes, that Dill knew spelled danger. He had seen somewhat that look on the night when Graham had first confronted him with the diary. Wisely he desisted.

"In conclusion," he went on, leaning over and picking up his hat, which he carefully dusted on his sleeve, "in conclusion, let me say only two things. One is that the—the bonds, you understand—the bonds you were so imprudent as to lay claim to, have been put in a safe place. Positively secure, you know.

"So, also, the—ah—evidence which you seem to think you had. Rather an interesting souvenir, for me. More prudent, I think, to leave such things than to carry them abroad. So, when you are at liberty again, do not, I pray you, be so foolish as to take a long trip for absolutely nothing. For positively nothing. Nothing, in any way.

"I feel confident that a young man of your intelligence and doubtlessly fundamen-

tal good sense will grasp my meaning and act accordingly. Nothing can ever be gained by trying to see either myself or my daughter again. A lock-box in a—a lock-box, you know, is sometimes most convenient."

Graham did not move nor speak, but sat listening simply, because listen he must. Dill stood up and pulled his overcoat around his stooping shoulders.

"One word, and then I must—ah—really, I must go, you know," said he, glancing up at the prison clock. "Your sentence is indeterminate. Everything rests with you. Good conduct and a sincere desire for reform will shorten this time of necessary discipline. The reverse will lengthen it.

"After it is over, I trust you will resume your former occupation and—hm-m-m!—succeed. Any second offense, you know—"

He paused, interrupted by the entrance into the rotunda of another prisoner—a mere boy, not over eighteen years old. Graham, for the first time since Dill had begun talking, took his eyes from the lawyer's face to look up. He already knew the boy's story—a hold-up escapade, construed as highway robbery, with a ten-year sentence.

The other visitor, the stout man, was standing there with arms wide open, tears gushing down his face. Into his arms staggered the boy, ghastly white. He had been in prison only a week, and had not yet learned to steel himself against it. He flung himself upon his father's breast, sobbing; and the father, bending his head, took the boy's face in both his hands and kissed him. It was all quite irregular. The warden had to intervene.

Dill, profiting by the diversion and having said all that he had come to say, decided he had better not linger to dole out the moral maxims he had been planning to conclude with. Glad of the chance to get away, he noiselessly crossed the floor, tapped at the wicket, and was let out.

Two minutes later he was in the big buff motor, which, with a growl of gears, started on its swift course toward Boston, and Number 2704 had been led back to his place in the prison exchange.

All the way over the Charlestown Bridge, Dill was thinking hard.

"Didn't say a word," he reflected, poisonously angered by his failure to draw Graham's fire or to impress him in any way, bitterly humiliated by the memory of Graham's cool, clear eyes, that seemed to look him through and through. "So, then, he's stubborn yet, damn him! Well, they'll take that out of him, all right. Just a word from

me to the chief, and—they'll break his nerve, safe enough. They know how! We'll see—we'll see!"

But all the rest of that day, that night, and many, many days and nights, even after an ocean rolled between him and America, he still saw those eyes. Still read in them something that not all his logic or hard common-sense, not all his reasoning, not the orange-groves, the silver-glinting southern sea, nor anything on earth could banish from his fear-stricken, brooding mind.

CHAPTER VIII.

First Lessons.

NUMBER 2704's cell-mate was a middle-aged, quiet man, somewhat bald, with a pointed little grayish beard, which, as a special privilege, he was allowed to cultivate. His left eye had a curious cast, due to the fact that a couple of black spots had punctured the gray iris. This peculiarity gave him the appearance of never looking directly at anybody or anything; it caused him a sort of squinting appearance, disconcerting and ominous. Yet, as a matter of fact, no milder-spoken man existed than he.

During the evening hour, when conversation was occasionally permitted, he sometimes talked a little with 2704, though even then he usually preferred to read books from the prison library, one after the other. He was an earnest, studious fellow, and one whose observations showed a great insight and a strong grasp of facts. He was not expansive in the least, but gave 2704 to understand that, once his day's work was done in the shop, he preferred to follow his own devices. He never volunteered his name, or any data as to his crime or sentence, and 2704 did not violate prison ethics by asking him.

The only title given him, beside his number, was "Piano," which 2704 inferred was due to his fine and dexterous fingers. He often wrote a short article or a bit of verse for the little *Mentor*, the penitentiary paper. Though quiet, he was far from disagreeable. Twenty-seven-O-four considered himself lucky to be bunking with such a man, rather than with some dope-smuggling, maundering, cursing brute.

Three months, or a little more, had passed; Barnard's occasional visits had dwindled to almost none at all; Stone's weekly letter had become two-weekly and showed signs of stopping altogether, before something happened that brought Piano and Switch, as his cell-

mate had been christened, because of his work, closer together, that established between them a bond of personal sympathy, and caused the older man to talk a little, guardedly, at such times as talk was tolerated.

This is how it came about. Almost opposite 2704's seat at the long, bare table in the whitewashed, cavern-like room where, three times daily, the convicts hastily and in enforced silence ate their miserable food, sat the young boy who had been "jobbed" by the police on the highway-robbery charge. The boy knew, as well as the authorities did, that his crushing sentence had been imposed simply because a gang of house-prowlers had been tearing things wide open in Boston of late, and the police had been obliged to save their faces by burying somebody.

He had been that somebody, that was all. This knowledge had made him restive and bitter. Once or twice already he had been "stood out" for some minor infraction of the rules. He had already been marked for punishment. Inhuman eyes watched him continually.

It was one afternoon at supper that the blow fell. The boy had been driven hard in the shop all that day, and had sulked. His appetite had gone back on him, and the supper made him downright sick. He turned away from the piece of "punk," or bread, and the tin basin of soup, made a wry face, and in a clearly audible voice gibed: "Sky-blue!"

At the sound of the word, which few prisoners would have dared utter in the presence of authority, a snicker ran along the funeral-silent table. Instantly a warder was upon the boy, hauling him away. Twenty-seven-O-four did not laugh. He only sat there, mad clear through, his mouth open as though to protest. He, too, was summoned for complicity and insubordination. Along with the boy, he was made to "dance on the carpet."

But 2704 refused to turn accuser. He was foolish enough to say that the soup was thin, and that he didn't blame the boy for kicking. That any word of his should thrust the lad into deeper torture was unthinkable. As a result, each of them got twenty-four hours in the "cooler" on bread and water.

That first experience with darkness, solitude, hunger and a despotism just as autocratic as that of any czar, gave 2704 some new thoughts, some thoughts such as, even after all he had gone through, he had never known the like of.

For the first time, now, he had come face to face with an item of the prison code—a code diametrically opposed to that of honor, a code wherein truth and kindness are crimes, while deception, boot-licking, and tale-bearing are virtues. He returned to his cell and to his studious mate with his brain stunned, his soul afire.

But "Piano" only smiled at him, condescendingly, almost as though in scorn.

"What business of yours, after all, was it what they did to him?" asked he in a low voice, so as not to be overheard by any one, official or eavesdropper.

"You mean that no matter what happens, what rotten injustice is put through—"

"Exactly. Justice, my young innocent, has no meaning in here any more. No, nor injustice. It's power that counts. Nothing else. Just as you found out before you came. Oh, I know about your case, all right. We know these things here. My advice is, see nothing, hear nothing, feel nothing. Get mum. Go into a trance, as it were. Just tick off the days, that's all. Sometime you'll be out, and then—there'll be things to do. But now, forget it. Don't try to help anybody. You can't, and you'll get in bad with the 'mugs.' Remember, a 'stive' isn't the outside world. It's a corner of Hades. Now you know what I mean. Are you wise?"

Without bothering for an answer, Piano took up his book again and, by the light of the incandescent, began to read. His mate saw that the volume was "Past and Present." He wondered. Why, thought he, should a philosopher like this, a man who chose for his companion Carlyle, be doing a term in the penitentiary? Urged by a sudden great curiosity, he asked:

"How in the world do you know all this and so much more? You must have seen some pretty rough work."

"Have I? You guess right first thing. What I've seen and heard would fill a book ten times bigger than that!" And he held up the volume of Carlyle. "Oh, no, I'm not going to scare you by telling you too much. No use of it. But after you'd seen the third degree worked on a helpless, quivering wreck, or seen a sick man tortured in the sweat-box, or heard a cell-mate shriek when they put the 'humming-bird' onto him—"

"Humming-bird?"

"Why, yes. Don't you know? They chain a prisoner into a metal tank, and then connect a sponge and a wire with a powerful

battery or dynamo. A warder, with rubber gloves on, passes the wet sponge over the naked body of the man till he faints or goes mad. It's a lulu!"

"Impossible!"

Piano laughed again. "Nevertheless, they do it," he replied. "They also give the water-cure. I've had it myself. They bound me in a bath-tub and squirted water down my throat, with a hose, till I had all the sensations of drowning, and lost consciousness. Oh, nice.

"But, after all, there are worse things than those. If you'd seen, as I have, a woman—a woman, I say—strung up by the thumbs and whipped until she fainted, or a girl bound into a whipping-machine and the machine turned till her blood ran, I reckon maybe you'd think a few things. But you'd never blow, my son. Not if you understood what you were up against. Nay, nay, sonny!"

"Wouldn't I? Well, I rather guess I would!"

Piano merely shook his head. "If you did," he answered, "you'd get a bigger dose of the cubby-hole than would be healthy, that's all. They'd break you—as they've broken so many thousands of others—body, soul, and mind, and, in the end, turn you out a hopeless, debased wreck, sure to drift into quod again sooner or later.

"I've never known a man to buck the system yet and get away with it. They kill without thinking much more of it than you would of lighting a pipe. It's brutality systematized. It's a force that knows its power. It can't be broken. No use, no use!"

He paused a moment, thinking. "The whipping-machine," he resumed, "had leather straps, by the way. Straps with iron rivets set in. Used in a Southern prison, where men are gallant. Those pens, down there, are torture. They use a whip, in some of the camps, called a 'red heifer,' about six feet long and notched at the end to make it bite. Before they flog, they dip it in lime-water to make it heavier. Every stroke flicks off the skin and takes out the flesh. Oh, yes, a good many men die from the effects, but what's the difference—when there are always plenty more?"

Twenty-seven-O-four gasped.

"Do you mean to tell me that in the United States—that in a free country—"

Piano smiled. "Ever see the 'bull-rings'?" asked he. "No? They also call 'em the 'strappadoes,' and the 'hook.' They're used for hanging up men by the wrists, like

beef carcasses, and letting 'em swing. How long? Oh, one day, maybe. Maybe seven or eight, just as the warder feels about it. Great institution!

"I knew about a chap named William Hamlin, nineteen years old, out at the Pontiac reformatory. That's in Illinois, you know. They strung him up for thirty-eight hours. William wasn't very husky, I guess. It killed him. Spine was broken in two places. Oh, yes, you can find it in the records, if you ever care to look for it."

Piano's mate stood up suddenly, and began pacing the cell.

"One little case I remember," continued Piano,—"that may interest you as showing how many rights you've got now. It happened in the jail at Erie, Pennsylvania."

"Well?"

"One of the boys kept insisting on his rights as a citizen, same as you seem to think you can. One day two or three of the warders threw him down a few flights of iron stairs, that's all. Nearly every rag of clothes was torn off him, and he was bleeding all over when they chucked him back in his cell. I never thought a man could let out such a heart-broken yell as he did. It was his last protest. He never said anything about having any rights after that. Learned his lesson, you see. As a matter of fact, a dog has just as many rights as a prisoner, that any official is bound to respect. That's gospel."

The young convict started to say something in a loud and angry voice, but Piano checked him.

"S-s-sh!" commanded he. "Don't be a fool. Want a touch of the cat yourself?"

"Go on!" said 2704 fiercely.

"I did a 'finif' in the Rhody pen, once," remarked Piano reminiscently. "Now, I can't go into many details, because there isn't much time left to-day, but I'll give you one or two little incidents I saw or knew of. I heard of men being kept in foul and rat-infested cells, chained to the doors, getting the gout on two bread-and-water hand-outs per day.

"I saw one lad beaten up with blackjacks till he was knocked out and bloody, and then given thirty-eight days in the black cells. I saw more than half a dozen laced up in the strait-jacket. That's hell, the jacket is. If it's placed at all tight, it cuts your wind almost off, and displaces your insides so that quite often you're injured or crippled for life. Sometimes it kills. I saw men kept in that infernal thing all the way from one to twelve hours, and I know that sometimes they're put

in for days at a time.' For what reason? Assault on an officer? Not a bit of it. I'll tell you. For having talked in the shop, or handed an apple or something brought in by a friend to some other 'con.'

"Then, there was another fellow, Bliss, who used to have epileptic fits. Once, when he came out of one, he found a warder sticking a needle into him to see whether he was really sick or just 'flickering.' Still another, Wells, died about two hours after they took him out of the dark cell, one time. Potter's field and the dissecting-table for his. Just a few cases to show you I'm right and you're wrong, my boy, that's all."

"But—but—can't anything be done? Aren't there boards of visitors, or—anything, to appeal to?"

Piano laughed. "Oh, yes," he answered. "But just you try appealing, and see what happens! I've known floggings to take place when visitors were actually in the jail. Of course, there were yells and howls and all that. 'What's the trouble?' 'Oh, just a man brought in with the d. t.'s. The doctors are trying to quiet him, poor chap!'"

"An open-and-shut game, I tell you. Nothing doing. If the abuse happens to break a bone or a neck, or something, why—an accident has happened, that's all. Or they say a man has been unfortunately injured while trying to make his 'elegant'—his escape, you know. Here. Look at this for a sample, will you?"

He reached up to the shelf in the corner, took down the compulsory Bible, and opened it. Inside the back cover a little pocket had been cleverly fashioned by separating the end-paper from the cardboard. Out of this pocket he slipped a few papers, looked them over, selected one, and handed it to 2704. The young convict looked at it.

"Read that," said Piano. "I've always kept it as rather an interesting sample of man's humanity to man, and one phase of twentieth-century civilization. It's good, eh?"

"Merciful Heavens!" exclaimed 2704, his eyes fixed on the yellowed scrap of paper, a clipping from some journal. His jaw tightened as he read:

TAKEN TO GALLOWS WITH HIS THROAT CUT.

JAILERS BANDAGE THE CUT AND DRAG MAN
LIMP TO EXECUTION.

SANTA FE, February 26. — John Conley, a miner, who killed James Redding and Charles Purdy at the Guadalupe placers, was hanged

to-day at Taos, a few hours after being found in his cell with his throat cut. The wound was bandaged. Limp and almost unconscious, Conley was dragged to the gallows and slipped through the trap, death resulting from strangulation.

Conley had been convicted by a jury, eleven members of which spoke only Spanish, and the trial was conducted with the aid of an interpreter. He had appealed to the Supreme Court, but didn't have money enough to push the case. Governor Hagerman refused a reprieve of thirty days.

Conley, who was born at Albany, New York, said he killed the two men in self-defense. He was a veteran of the Civil War.

Piano, smiling, stretched out his hand, took the clipping, and tucked it back into the Bible, which he replaced on the shelf.

"Not money enough, you notice," said he. Calmly, he went on reading his Carlyle.

CHAPTER IX.

A Sly Bird Spreads Its Wings.

EIGHTEEN months lagged past, each day long as a week, each week a month, and every month seemingly a year. Twenty-seven-O-four had long ago fallen into the routine. To him the outside world had come to be a distant memory. It seemed to him he had been always pent in bars, walking up and down iron stairs, silently eating miserable "chuck" in a cavern, with no taste of anything humanly decent except on holidays—for the current prison jest was that the inmates lived on six square meals a year.

He could scarcely imagine that exercise could be anything save a wretched mockery of tag or base-ball in a bricked yard, or a ghastly farce of amateur theatricals. Chapel he attended because it was a little break in the misery, a chance to let his voice out in the hymns—and how the convicts bellowed them, blowing off steam for days and days of enforced silence! But to the service he never paid much heed. He knew the type of man who preached only too well; the type of lecturers, too, that sometimes came, white-vested, to deliver platitudes. Some of these made him think of Dill occasionally, and at such times a new light would come into his dulling eyes.

Eighteen months of daily and hourly torment for a free spirit like his, "cribb'd, caged, and confined" because of what? Because of having asked for justice. Nothing more. Not a moment of the time but burned the iron in his soul.

All this time he was learning, learning many things. Learning never to interfere, whatever happened; learning to be deaf, and blind, and dumb—not to see blows, hear shrieks, or answer insults. Learning to bow his neck to the yoke. Learning to submit. For it was useless to resist, after all.

He came to know about the dope-traffic in jail, the smuggling and sale to prisoners of opium and other drugs, carried on by trusties and warders at a huge profit—five dollars' worth of stuff bringing forty or fifty. He came to know how men, even in distant parts of the penitentiary, could communicate with each other by means of ciphers, go-betweens, rappings, and curious secret codes. He learned how a steel bar may be cut with a mere silk thread and emery powder.

He began to get an insight into prison traditions and the uncanny superstitions of criminals—the charms and talismans that crooks habitually carry, their custom of often leaving an object at the site of a crime, their formulas and beliefs, all the way from a simple word to the ghastly "hand of glory" and the "slumber-thumb," cut from a corpse and believed to prevent arrest or make a victim sleep.

Such things, and many, many, many more, scoffed at by the uninformed, but vitally real in the underworld, he came to know. And, added to his own experience with the law, he piled up endless similar cases about other convicts. He began, in short, to understand the truth, the cleavage of society into two sections, the precise relation that the law bore to each.

So the year and a half passed. And as winter settled into spring again, he began to get well into the prison harness, to think prison thoughts, live prison life unprotestingly, accept without question everything that happened.

Perhaps the strongest force of all to steady 2704, however, to keep him calm and passive, was the thought that good conduct would hasten his return to the world of living men. His own experience, added to what Piano from time to time told him—as, for example, a man getting five years for having stolen a drink, or another being sentenced to seventy-five days for the theft of seven pennies, while an upper-class theft of a million went unpunished—such knowledge developed in him a clear perception of the truth, the real character of modern law. He remembered, too, a thing Piano had once said.

"Law? Why, my lad, law's a net. The big fish break through it; the little ones get

hung up by the gills. That's all there is to that!"

The thing stuck in his mind. He pondered it. His keen intelligence gave it unequivocal assent. All these things, and many another which only a thick book would find space to describe, worked on him constantly. They molded him, formed and altered him. Not all at once, but gradually, yet with absolute logic and honesty, he shucked off the conventions of life and assumed the realities. And his pale, prison-worn, sensitive face showed now another strength—the strength that comes from recognition of truth.

More and more, despite what he knew now of Piano's real career, he came to sympathize with him, to share his views, to accept the wise and shrewd dicta which this singular man, cultured, yet fully in touch with the underworld, its life, its *argot*, its thought, occasionally let fall. And so it was that, more than any other person at the gray old penitentiary, he felt a sense of keen loss, of deprivation, when one day Piano disappeared.

I doubt if the head warden himself regretted that disappearance more than 2704. When Piano was missed at supper, when he was found not to be in his cell, or anywhere about the prison—when by whisperings, tapplings, secret and devious ways the information trickled through the sad hive that a break had been made and a getaway pulled off, 2704 had a hard fight with himself not to wish the man back again.

Half that night he lay, turning on his bunk in the rough blanket, feverishly wondering what had happened and just how the thing had been brought to pass; marveling at the nerve and self-restraint of the man who, evidently having planned this move, had never by word or sign or look so much as hinted it to his closest companion.

His admiration would have been full ten times keener had he known the truth, known the whole story, the long planning, the infinitude of careful thought and preparation that had led up to the escape. More than six months before, Piano had succeeded in getting a place on the editorial staff of *The Mentor*. He had known when one of the three editors had been released at the expiration of his sentence. For months and months before even that he had been writing and sending in items and articles, with just this end in view. He had applied for the vacant post, and had got it. That had been the first step.

"*The Mentor*," you understand, that lit-

the gray-covered magazine written, edited, mimeographed and circulated inside of the prison walls exclusively by men who have "done things," as the phrase is, has its office down in a little room on the level of the yard. This room had for a long time attracted Piano, because of possibilities that his quick eye had seen there. Once he could gain access to that room and could spend uninterrupted hours there, he felt sure of results.

There were, he knew, three editors—one to make stencils for the mimeograph, one to handle the machine and help edit, one to do literary work exclusively. Piano coveted the job as mimeographer, where he could use the waxed sheets, the paper, the blue ink and the machine. That job he secured.

He soon learned all there was to learn. His eye, practised to take in the whole lay of an office or a bank at one glance, had no difficulty in estimating every possibility of the room. Its walls were of bare stone. Its two windows, barred of course, looked out at the base of the towering prison-wall. Its furniture consisted of three desks, the machine, a big filing-cabinet, and a few shelves and drawers. To the outsider, nothing very promising there. To Piano, everything.

Working on the editions for a month or two, each edition consisting of 10,000 sheets, he scraped off a little wax here, a little there, until he had accumulated, all unnoticed, a ball possibly the size of half an egg. This took a long time, but Piano had more than enough—had seven years yet to serve, in effect. Time was no object.

The wax was easily hidden at the back of one of the drawers, under a pile of old, discarded manuscript. When enough had been obtained, he smuggled it, via the subterranean channels that exist in every prison, to an accomplice whose exercise hours allowed him access to the iron door separating the eastern yard from the corridor leading to the front office. After a couple of weeks or so, the wax found its way back to Piano. On it was a certain impression. Piano studied this, and smiled.

Confiding in nobody, not even the other two convicts who worked with him, but watching his chances, using a minute now and then, when he happened to be alone in the office-cell, he fashioned a key from a strip of cast-iron which he detached under the machine where there was not one chance in a hundred it would ever be missed.

No one could have made such a key, from a wax impression, even with a file and all appliances, but an ex-safebreaker and yegg.

Piano did it, with only the tiny screw-driver that was used for repairing the machine. It took him a long, long time, but at last it was done, the key hidden where the wax had been, and the wax was crumbled up, then bit by bit thrown into the waste-basket and so lost to view.

All this time, other work had been going forward. One of the steel strips of the mimeograph frame unaccountably broke, about a month after Piano began his work on the paper. A new one was ordered and put on. The pieces were thrown into a drawer, innocently enough. There were two of them.

Next day, two pieces were taken away, but the warder never thought of fitting them together to see if they made up the total original length. Had he done so, he would have found some three inches missing.

That three-inch strip of thin steel stayed for a few days tucked away under a box. After that, with now a bit of labor, then a bit, it gradually became a file. A file that Piano knew could easily be bound with string to the blade of the little screw-driver. The screw-driver handle, he figured, would be easy to hold and would prove all-around convenient.

Sizing up the situation, at last, he took account of stock on his inky fingers.

"Key. All right for that. File. O. K. With what I've done already on the two middle bars, give me half an hour and I'm fixed. Ink, blue ink. Lots of it. Tubes full. Cap—remains to be made. Plenty of cardboard, paste and paper. Take things all together, I should say about the middle of next week would be a good healthy time to go for a stroll. Sorry to give up a steady job as assistant editor on a paper—especially when times are so hard, too—but this spring weather certainly does make me uneasy. Heigh-o!" he yawned. "I suppose I've got to begin earning my own living, again, before long!"

A step sounded in the corridor and a warder peered through the bars of the office-door. But he saw only a studious-looking, inky-handed man in a gray suit wearily working the frame and the big rubber roller of the old machine.

CHAPTER X.

The Bird Flits.

TWO circumstances, Piano knew, must fall together, before he should dare to make a break. First, he had to choose an

afternoon when he could have at least half an hour to himself in the basement room; and second, that hour must come coincidentally with the presence of old man Flynn in the front office. Flynn was a superannuated guard, stupid and somewhat short of sight, but still serviceable enough to sit at the desk and receive visitors.

The front office work, of course, was never calculated to bring him into any direct contact with the prisoners. Piano did not reckon on having much trouble with the man, especially if the lights had not been turned on in the hall at the time when he should pass through it toward the street.

With considerable skill he obtained the information that Flynn was usually on duty Monday, Wednesday and Friday afternoons from four to six. The attempt, then, must be made at one of those times. Piano waited. Waiting, he used his few free minutes, now and then, to good advantage, constructing a close imitation of a warder's cap.

The abundance of pasteboard, paper, mucilage and cord, gave him all needful materials. He fashioned the thing with the editorial scissors, painted it blue, and blackened the vizer with different colored mimeograph inks; then lettered the front of it very cleverly with the gold paint wherewith on special occasions the editors were wont to decorate the cover of their magazine. When it was done he surveyed it, in private, under a dim light, and assured himself that it was good. Then he emptied a file-box, put the papers into other boxes, hid the cap in the empty box and stood the box in behind a row of others on the top shelf.

"I guess," said he, "things will be doing soon, now."

Everything ready, he one evening took a copy of *The Mentor* to his cell. This copy he marked, here and there, with little pin-pricks; he then mailed it out to an address in South Boston. It passed inspection all right. The recipient studied it carefully and prepared for action.

For more than three weeks he waited patiently, never by any look or word betraying himself, till everything should fall just right. At last his chance came.

It was a rainy April afternoon, the twenty-first of the month. All day the clouds had lowered. Gray mists had hung over the city, thickened by smoke and steam from the railway just to west of the prison walls and by fog drifting up from Miller's River, beyond. There had been no exercise in the rain-splashed, dreary yard. Everybody

seemed depressed and irritable. The chief editor, his work done, had been drafted off to help in the book-keeping department. Piano and the other man had been left alone. It was just after four o'clock. An inspection had been made; Piano knew that the chances were against anybody else visiting the basement till supper time, half an hour later.

"Now!" thought he, straightening up from his work and looking his companion fair in the eyes with his peculiar squint.

"Tired, eh?" asked the other, sighing as he paused for a moment over the stencil he was graving.

"Not half so tired as you'll be in about one minute," answered Piano, "if you so much as peep! Now, no questions! Just put your hands together, so—and be quick. I'm going to tie you up!"

The man gaped at him; but Piano's words and look left no room for controversy. He obeyed.

Piano lashed him quickly with cord that had fastened a bale of paper. "This," said he, "will keep you from getting a taste of the dark-hole or the sweat-box. I'll gag you, so; now then, all you have to say is that I strong-armed you, and you're safe. You'll only have to stay this way a little while. I guess you can stand it!" With great speed and skill he triced the man, then shoved him over into a corner, made him lie down and bound his feet.

"There you are, now," he remarked. "Remember, if you ever snitch—well, you know!" The man, glad enough to help a fellow-convict, after all, only winked in signal of comprehension and lay still.

"You 'round' on me, and I'll get you, sure as guns!"

Piano gave no further heed to him, but opened a drawer, fumbled in the back of it, brought out his steel file and quickly lashed it to the screw-driver. Then, going over to the window, he knelt and began working away at one of the bars.

At the first stroke, the file plowed through a mixture of wax and dirt that had concealed a cut more than half-way through the bar. Piano labored fast and hard. In five minutes he had finished that bar and had begun on the other, which had likewise been prepared.

A step sounded somewhere outside, far down the hall. Piano waited, listening intently. His face was a trifle paler than usual, but calm. His eyes were steady. The sound died away. Again he threw himself at the filing.

Both bars, now, were cut. Before bending them inward, Piano did a very curious thing. He peeled off his coat and trousers, threw them on the stone floor, and reached for a bucket that stood in the corner. Into this he emptied the contents of three tubes of blue ink, tubes which he ripped up with the file and squeezed out almost with a single gesture. He snatched the big benzin bottle from the shelf where he had placed it after the last clean-up of the machine, and emptied it into the bucket, too. Hastily he stirred the mass with the scissors. The benzin quickly dissolved the thick, pasty ink. There resulted a large quantity of thin blue liquid.

Into this liquid he threw the trousers, sopped them up and down, turned them, dipped them. He drew them out and wrung them. From dark grey they had become dark blue.

The coat he treated likewise. There was hardly enough liquid left. He swabbed the coat round and round, spreading the color. He held it up and surveyed it.

"Rough work," said he, judicially. "But it'll have to do, on a pinch. After the rain wets me down, I guess the general effect will pass. It's got to! But I'll just take these along, anyhow, in case of trouble." And he slipped the scissors into his pocket.

It took him hardly a minute to dress, and soon he stood in the office-cell, clad from head to foot in wrinkled blue clothes.

"Lucky there is lots of rain, this P.M.!" he added. Then he set the cap on his head, ran over to the desk, took the key that he had made, and pocketed it.

"Mum, you!" he commanded, turning to the tied-up convict on the floor. "You know how long a boxman's memory is!"

A moment he stood listening. Came a far stroke on a gong, followed by the faint slamming of a door.

"Work's over," said he. "They'll be at supper, now. Couldn't be a finer time!" He paused, as though he had forgotten something. "Hm-m!" he added. Then he drew the scissors from his wet pocket, and with two or three firm cuts squared off his pointed beard. "I guess that will help some," he concluded.

Over to the window he stepped, seized first one bar, then the other, and with a remarkable display of strength, bent them, hauled them inward, twisted them aside. He snatched a mucilage-pot from the desk, poured a handful of mucilage into his palm and smeared it quickly over the large pane of glass. Then, picking up a sheet of news-

paper, he pressed it against the gummed window.

One sharp blow with the scissors handle; the glass broke, but, held by the paper, did not fall jingling to the bricks outside, as it would otherwise have done. Piano deftly enlarged the hole. In less than two minutes he had broken the pane almost entirely out and had laid the pieces of glass on the floor. The way was now clear, for him, into the yard.

He stood an instant peering out. The yard was deserted. Under the white glare of a light on the wall, nearly opposite, the wet bricks and little puddles of water sparkled unevenly. No sound, save the pattering of the rain.

"I guess she'll do," remarked Piano, in a calm voice. "So long, buddy!" He paid no further attention to the tied-up man in the corner, but stuck his head out through the window, cautiously looked up the yard, then down it, noted that nobody was in sight, and—silent as a ghost—straddled the sill. A second later, he was outside in the rain.

One glance told him that the guard upon the wall was around the corner, to westward, and that the coast was clear. Quietly, unconcernedly, he walked with a quick and firm step down the yard; turned an angle of the prison, and approached the door leading into the corridor that he knew communicated with the office.

"I sure do smell of gasoline, something savage!" thought he. "But I guess if I go right through, old Flynn won't fall for it before I'm out. We'll soon see, anyhow."

Now he was at the door.

He stopped to listen, but no sounds came to him save the drizzle of the pattering storm.

He took from his pocket the key, and noiselessly inserted it in the lock. He tried to turn it, but it stuck. With a precision, a skill, a nicety due to long years of experience he manipulated it, listening intently. He tried again. It resisted. He gave it the full strength of his hand. The lock yielded, grating; the bolt slid back. Piano smiled and nodded.

He attempted to withdraw the key, but this he could not do.

"No matter," said he to himself. "I sha'n't need it again. It'll make a good souvenir for the mugs."

He turned the knob, pushed the door gently inward, stuck his head into the dark corridor and looked both ways. Nobody in sight. "Cinch!" exulted he. "Cinch, sure as guns!"

Into the corridor he stepped, closed the door after him, and with a firm, business-like step walked toward the office. As he went, he settled his cap over his eyes and squared his shoulders. His left hand he slid into his pocket, where the scissors lay.

Now he was at the office door. Now the door was open. Piano in a lightning glance, his heart throbbing suddenly as though to burst, saw that only Flynn sat at the desk inside the partitioned space where the register is kept.

"Rotten day, all right," said Piano, stepping into the office.

The old man, barely glancing up from his paper, grunted assent. He thought he saw nothing but a rain-soaked warder. Piano gave him no time for observation, but looked up at the clock on the right hand wall, thus partly concealing his face. Then he turned and walked forward across the square-tiled floor toward the exit.

Already he had reached it, when something—the instinct of the old-time watchman, perhaps, or possibly the curious odor of benzin that now permeated the office—warned Flynn of danger.

"What's that ye say?" asked he, dropping his paper. "Hey, youse! Come back, here! Who th' deuce—?"

Piano, answering not, swung the outer door open and passed through. The blood was hammering in his temples; his breathing was labored and painful, but he controlled himself.

On the broad upper step of the granite stairs leading down to the paved space in front of the prison he even forced himself to pause, an instant, and to look up at the sky as though debating whether to go on or not. Then, quite deliberately, he walked down the steps—out into the world again!

Outside, yes, but how far, how infinitely far from safety yet! For already the old watchman was after him. Piano reached the bottom of the steps, turned to the right and advanced in the direction of the little triangular space where Chapman, Austin and Washington Streets all converge.

He had now perhaps fifty yards to go before he could swing into Chapman and make a break for the railroad, a quarter of a mile southwest—his objective point. Flynn, from the steps, was bawling something after him, he knew not what. Other cries arose. A gong began to bang and rattle. Piano spat out a curse.

Nothing to gain, now, he realized, by subterfuge or any more delay. He jammed his

cap tight down onto his head, picked up his heels and broke into a swift run. Behind him he heard cries and sharp, excited voices. A revolver cracked. Past his head zoned a waspish bit of lead. Piano fled.

Up in front of him loomed a man, a civilian, with outspread arms. Piano leaped at him, brandishing the scissors. The man's courage died; he jumped aside and swore. Piano doubled the corner of the wall, to the right, and like an arrow sped along the brick sidewalk through the gloom. His feet, shod in rough prison leather, clattered a rapid-fire tattoo.

There were only a few people abroad. The street was ill lit by occasional flaring gas-lamps. Piano's blue clothes and vizored cap confused folk. He had a block or two the start of any real pursuit. And, cleverly, he shouted as he ran:

"Hey! Stop! Stop! Head him off! Hey, *there* he goes!"

Thus shouting, pointing wildly, he diverted attention as he passed the gaping, occasional citizen like a streak of blue, a vague and swift form in the down-settling fog. That was all he wanted, now, just to prevent interference from in front. As for anything behind, he knew he could outdistance all comers for a few minutes, till his wind should begin to fail. "Just let me reach the track, and I'm all right!" he thought.

Now he was there; now he leaped past the gateman's shanty, darted westward, with a gathering crowd shouting behind him and impeding the officials. Now, right at hand, he saw a train of box cars.

"Here's luck, eh?" thought he, and like a storm-blown wraith vanished under one.

Up again, on the other side, he scuttled toward the freight-yard. Behind him he heard shouts, cries, confusion. Despite his panting breath, the pain in his lungs, the leaping of his overtaxed heart, he laughed.

"The bulls will get a run for their coin anyhow, a good one!" he giped.

"There he goes!" yelled a voice. A rock came whirling, then a lump of coal. Piano made a dive between a couple of cars, crawled on hands and knees, unseen, across a spur track, and reached another string of empties.

But, as he scooted along the cinders between that string and a file of oil-tanks, an overall-clad brakeman suddenly barred his passage. Piano saw the man crouch and double his fists.

Waiting not to be attacked, the fugitive

snatched up a broken fish-plate, weighing perhaps ten pounds, and hurled it, full force, with most excellent aim.

The brakeman flung up his arm, then dropped it, limp and broken, with a howl. Piano rushed at him, landed him a blow on the jaw, and passed, agile as a hunted jack-rabbit.

He heard a whistle blowing; then came the rapid tolling of a big bell.

"Lots doing, eh?" grunted he.

Near a switch-tower he paused to reconnoiter. For a minute or two, he had shaken pursuit off his trail. Panting, he glanced about him.

"There's the tower, all right," he said. "The lumber-yard's just beyond. If I can only reach that, now, I'm O. K."

Down the yard he heard voices calling, coming nearer and nearer. Two tracks from him, a clattering *bump-bump-bump* told him a train was being moved. Warily he dodged under a car, crawled across a vacant track and reached the slow-moving train.

He stepped between two of the cars and hoisted himself on the bumpers. Crouching, he was carried slowly past the tower. Then he heard angry yells. Rightly he surmised that some officer or other was shouting at the engine-men, ordering them to shift no rolling-stock till the yard had been searched.

With a satirical smile he peered out from his shelter. Dimly through the fog he saw men stumbling along the track toward him; two or three lanterns splotched the gloom with yellow.

"Come along, and welcome!" he gibed, climbing over to the other side of the train, which now gritted to a stop.

As the brake-shoes stopped squealing, he dropped lightly to the ground. "There she is!" he exclaimed.

Before him rose a high board fence, over the top of which he saw piles of seasoning lumber. Piano skirted this fence, slinking double in the railroad-ditch, slopping through mud and water, directly toward the noise of pursuit which now sounded ever louder. As he went, he scrutinized the fence.

"Ah!" said he, all at once.

One of the boards had a chalk-mark on it. Piano scrambled up out of the ditch, took hold of this board and pulled it outward. It had been detached at the bottom, and gave. He pulled harder. He made an opening big enough to crawl through. Into the lumber-yard he crept. The board sprang back into place.

He stood up, drew a long breath and

looked around him. At sight of another chalk-mark on a pile somewhat to the left, he smiled. "Slim has certainly been on the job and done things right!" he affirmed cheerfully. "That *Mentor* I sent him did the biz!"

Proceeding through the mud to the marked pile, he knelt down, reached far in under it and felt around. His fingers touched something—a bundle. He drew the bundle out, and opened it.

"Couldn't be better," smiled he, surveying by the dim light the greasy overalls and jumper, the cap and worn shoes it contained.

Three minutes later he stood there in the garb of a workman.

"Here goes for the old stuff, and they're welcome to it!" he exclaimed. He laid his discarded outfit on the ground, put a rock on it, rolled clothes, shoes and rock all together, and with a great heave hurled the mass far over the fence. It fell into an empty coal-car, where, next day, it was discovered out at Allston—a clue which utterly finished up the tangle of purposeless official pursuit.

In the pocket of the disguise Piano found a cob pipe, tobacco and matches. Calmly he filled the pipe and lighted it. Then, smoking like an honest man weary with a hard day's work, he made his way through the lumber-yard to the gate, passed through unchallenged with the crowd of home-going toilers, and thereafter vanished wholly from the ken of the law.

Just a little over a week later, Number 2704 received by mail from New York a book which, after having been inspected at the office, was allowed to reach him. It was a copy of Carlyle's "Past and Present." There was no donor's name inscribed, but Chapter II, "The Sphinx," had been marked with a blue pencil.

Twenty-seven-O-four smiled to himself.

"Well, Piano," reflected he, "I guess you're safe, by now. It's just possible—maybe more than possible—you and I may meet again, one of these days. I shouldn't wonder if perhaps you could help me, help me more than any law, eh?"

Then he sat down and began reading the chapter.

CHAPTER XI.

New Thoughts and an Old Friend.

WE understood, before it was half done, why Piano had chosen just this book from among all others, and this chapter in

the book. For, here and there through it, sentences and paragraphs leaped out at him, convincing, thought stirring, inspiring as the occasional shrewd, bitter or philosophical flashes that the escaped yegg had formerly at rare intervals let drive at him. Over a few lines he lingered especially, his eyes vague and half-closed as though seeing far visions.

He read the chapter through, that evening, and the whole book in a few days. The chapter itself he reread, many, many times in the succeeding months. Some of its fatalism, its savagely worded, triumphant irony burned itself into his brain; it became part of him; it helped him to see clearly, to understand some things which till now had been but half-seen, dimly comprehended.

Foolish men imagine [cried Carlyle to him], that because judgment for an evil thing is delayed, there is no justice . . . Judgment . . . is many times delayed some day or two . . . but it is as sure as life, it is as sure as death! . . . Forget that, thou hast forgotten all. Success will never more attend thee. No more success; mere sham-success . . . rising ever higher, toward its Tarpeian Rock.

The din of triumphant Law-logic, and all the shaking of horsehair wigs and learned sergeant gowns having comfortably ended . . . what says the high and highest Court to the verdict? For it is the Court of Courts, that same; where the universal soul of Fact and very Truth sits President—and thitherward, more and more swiftly, with a really terrible increase of swiftness, all causes . . . crowd for reversal—for reversal with costs. Dost thou know that Court; hast thou ever had any Law-practise there?

He thought of Dill, reading those words, of Dill who all the long, long years had robbed him and betrayed him; who, for a mere asking of justice, had reft him of liberty, love, reputation, future, perhaps of life itself; who now dwelt in luxury and ease, in safety, in the enjoyment of honor and esteem, all but-tressed and defended by the thing called law. He thought of Agnes, taken from him by perjury and fraud—Agnes, whom he did not blame, whose face still haunted him—Agnes, lost forever, if the judgment of the court, of organized society should be allowed to stand.

So thinking, his mouth tightened, and the strange look that Dill had noticed in his eyes, the look that had so filled the old man with apprehension and venom, came back more strongly, more full of purpose than ever.

. . . Oceans of horse-hair, continents of parchment, and learned-sergeant eloquence (he read),

were it continued till the learned tongue wore itself small in the indefatigable learned mouth, cannot make unjust just. . . . Enforce it by never such statuting, three readings, royal assents; blow it to the four winds with all manner of quilted trumpeters and pursuivants, in the rear of them stand never so many gibbets and hangmen, it will not stand, it cannot stand.

"The unjust cannot stand?" queried the convict of himself. "Ah, but I doubt that! A legal judgment, rendered in court and backed by all the powers of the State—what shall overthrow it? Justice? That is another matter. Justice and law—two different things.

Things are, because certain men have the power to make them so. Men who are the masters; what they decree must stand, right or wrong. If wrong, then right must come about because of other and different mastery. Mastery it is, at any rate, that wins. The master comes into his own. The "master—" Over that word and that idea, he brooded long.

He read further:

In this world, with its wild-whirling eddies and mad foam-oceans, where . . . judgment for an unjust thing is sternly delayed, dost thou therefore think there is no justice? It is what the fool hath said in his heart . . . I tell thee again . . . one strong thing I find here below the just thing, the true thing . . . If thou hadst all the artillery of Woolwich trundling at thy back in support of an unjust thing . . . I would advise thee to call halt . . . If the thing is unjust, thou hast not succeeded; no, not though bonfires blazed from North to South, and bells rang . . . and the just thing lay trampled out of sight, to all mortal eyes an abolished and annihilated thing.

Await the issue. In all battles, if you await the issue, each fighter has prospered according to his fight.

And again:

What is justice? that, on the whole, is the question of the Sphinx to us. The law of Fact is, that Justice must and will be done. The sooner the better; for the Time grows stringent, frightfully pressing!

. . . The grand question still remains, Was the judgment just? If unjust, it will not and cannot get harbor for itself, or continue to have footing in this Universe.

All this and much more he read and pondered. He came to understand the character of law as a class thing, made by property,

to defend property, and backed up by police, courts, prisons, guns, armies, navies, every instrument of force or repression capable of being used by property, which is to say, the master of the world. Out of it all came to him a clear conception of that mastery; the idea of it gradually took possession of him. But as yet he had gained no very clear idea of the manner in which he meant to put it into practical form.

Bred all his life to respect the law, merely because it was the law, without inquiring into its origins, meanings, or applications, he did not in a single moment arrive at the full consciousness of the thing that he must do. Yet, through all the days and weeks and months that followed, the leaven of understanding, of knowledge, of determination was surely working in his soul.

One day, after he had almost learned the book by heart, an idea occurred to him. He marked certain of the most stinging passages and had it sent to Martin Stone, in New York. Later, he wrote Stone a letter which gave him to understand that the book was to be forwarded to Dill, at San Remo. Dill eventually received it; and his insomnia took no benefit from its reading. Always before the old man's eyes hovered the vision of a time, surely to come, when all his subterfuges, all his power could no longer keep the sender of that book behind steel bars; when Graham should be Graham again, no longer 2704; when justice—not law—might yet be done.

Each month that passed, aged him six months. He grew, almost from day to day, decrepit. Agnes, who smiled but rarely, sat with her father long, long hours, gazing out through the palms and orange-trees at the Mediterranean, at the red and blue sailed, latteen-rigged fishing boats. She had grown grave and very thoughtful, it seemed; but with all her thought she asked no questions of her father. She, too, had her problems, deep, seemingly insoluble.

So, for them all, the time dragged on.

As it passed, 2704 found himself more and more wholly forgotten by the outside world. Barnard had long since given up any pretense of coming to visit him, and Stone's letters were growing very rare. The convict came to think the thoughts of the penitentiary, to live its life, even to take a certain interest in its brutal or petty happenings and its inmates. Men in prison, he found, differed very little from men outside. They had simply been caught, that was all.

When an occasional commission or socio-

logical club came to visit the place, to peek through the bars, pry, question and patronize, do like people at a zoo, all save actually poking the convicts with umbrellas, 2704 grew sick at their drivel and hypocrisy. It all sounded like Dill himself.

The prisoner had a keen notion that much of all visitors' interest rose from the sneaking, hidden fear each one of them had that some time they too might surely get their just deserts and sit in gray. Thinking of this, 2704 recalled Piano's wisdom, and smiled.

He lived his own life of reflection in the company of books. He did his work, said nothing, got no black marks and became a model prisoner. He refused to let persecution goad him to anger. If shrieks rang through the iron house of sorrow, if some unfortunate "went woody" and dashed himself howling against the bars till drugs and force quieted him, 2704 listened, thought, but kept silent.

Twice came awful days when the word was whispered round that a condemned man was "going up Salt Creek." Days when nobody went to work in the shops, when the atmosphere grew tense with horror, when bullet-headed and misshapen hulks of men, damned by their birth and breeding, knelt in fear on the stones, prayed, moaned, cursed, gibed, wept—execution days when in the death-house the chair burned out a human life. Then 2704 noted everything. He neither cursed nor prayed. He thought.

So two years more passed. The prisoner found that subtle changes were taking place in the structure of his mind. Each trivial incident began to assume undue importance. Things that, outside, would not have been worth a minute's thought, began to loom big before his mental vision. He found himself losing his sense of proportion. If anything went wrong at the switch-board, if the library-officer came to his cell while he was out at exercise and his book was not changed, that slight annoyance cast a gloom over him, made him brood for an hour or two.

What man, asked he, ever was "reformed" by any such unnatural conditions of seclusion, silence and monotony? What man, having committed crime, but must go forth from prison a worse man than he had entered it, wiser in methods, instructed by the masters of evil, embittered, hardened? Twenty-seven-O-four shuddered. His hope, now, his one desire was that something of his old self might be left to him at the time of his release.

Release came at last, a commonplace and routine thing like every other. One May day, four years and a month from the time of his incarceration, 2704 was summoned to the office. There he was told that, the following week, he would be free. He was given a stereotyped moral lecture and sent back to his work. The news made little impression on him. It seemed to bear no essence of reality—to be a mere delusion, a bit of fiction, a vapor of the fancy. Rather than elation, it brought anxiety.

A strange feeling of apprehension, of shrinking from the outside world began to possess the convict. What would it be like, now, liberty? The other time friends, the work, the world—what? The man realized that his years of servitude, of dependence, had worn down his nerves and brain. Habit had worked its will on him. When the last day came, he felt that he would rather put off his freedom for another day.

"Not to-day," he thought. "To-morrow, perhaps; to-morrow I shall be ready. Not to-day!"

They gave him a cheap, ill-fitting suit of shoddy clothes, a five-dollar bill, some platitudes and perfunctory hand-shakes, and turned him out like a blind man into the glare of furnaces—a blind man who knew not which way to turn that he might avoid the fire.

As he stood on the granite steps, blinking up at the sky, breathing the spring air, looking with wonder at the passing drays and wagons, his ears offended by the unusual noise, he felt for a minute the strong impulse to walk back into the shelter of the penitentiary, go to his switch-board, or return to his accustomed cell and take up once more the half-finished book.

"It's—it's all so different from what I thought it would be like!" he exclaimed. Dazed and perplexed, he stood there a minute or two, trying to realize the truth that he was free. Free, yet not the same man that he had been. Never the same man, never any more!

Years and years gone, far more years than the actual toll of four; a seeming eternity. Graham gasped slightly, walked down the steps with an uncertain, slouching tread, turned to the right, and with the prison shuffle, due to endless lock-stepping, started toward City Square.

How high the houses seemed; how ominous the open, unbarred spaces! Almost like a sufferer from that singular disease called

agoraphobia, he shunned the outer edge of the sidewalk and crept along close to the wall. He touched the wall with his hand; it gave him confidence. Two or three passers-by turned to look at him, smiling with wise patronage. They knew!

At the corner of the long wall, where the penitentiary enclosure ends, he stopped. There was an open square to cross. He stood looking at it, confused and weak. Suddenly he turned his head and started sharply. A man had spoken to him.

"Carlyle!" the man had said. Just that one word.

Graham looked at the man, not yet understanding.

He saw a compact, middle-statured fellow of indeterminate age, shaven, carefully and correctly dressed, with a singular cast in his world-wise, steady eyes. The man stretched out a palm to him. Graham shook hands, unresistingly.

"I knew you were getting your turn-out, this afternoon," he remarked. "We have a way of knowing things, all sorts of things, in my world. That's more than your 'respectable' friends can say. I notice there aren't any crowds of them waiting to receive you, eh?"

"Who—who are you?" asked Graham astonished.

"Who am I? Oh, just a lover of good comfort and good literature, an especial admirer of Carlyle, that's all." And the man laughed easily. "Come along," he added, taking Graham's arm. "You need somebody with you, for a while, till things begin to straighten out. I know all about it, myself. I've been there, newly-hatched, more than once—feeling just like you feel now. Don't worry; don't try to think; just come along with me. I'll see you through. Trust me, my lad. I've never sunk a pal yet, and I never will. Come!"

Graham felt a sense of singular uneasiness, almost of dread. But, half-dazed as he was by the strong light, the noise, the vacancy of the unbarred spaces before him, he yielded.

The two men, arm in arm, headed along the ugliness of Charlestown's streets toward the "L" station in the square. The greater ugliness of the penitentiary faded behind them.

All at once Graham stopped, passed a hand over his eyes, and looked the man square in the face.

"Piano? You?" cried he.

(To be continued.)

The World's Record For Passenger Traffic.

BY C. W. BEELS.

DURING the week beginning Monday, September 5, at 1 A. M., and ending Saturday, September, 10, at noon, the trunk-line roads running into New York City unloaded 1,262,940 people. Pretty near the entire city of Philadelphia landed by trains in the great metropolis. The entire population of Madrid, Rome, and Yokohama poured into this great big New York inside of 132 hours.

And this was accomplished with no more commotion than would be occasioned by the arrival of a delegation from Cowcreek Corners!

This is the greatest record for train-service in a single city. Within ten hours on Labor Day the New York Central lines alone handled over 42,000 *extra* people. This number, added to the 80,000 *regulars*, is the record for *one terminal*.

Not an accident was recorded on any road handling these hundreds of thousands of human beings.

How 1,292,940 Human Beings Were Safely Landed by Trains in New York City in One Week. The Greatest World Industry—and Why.



GREATER NEW YORK, the imperial city of the western hemisphere, now contains 4,766,883 inhabitants. These are the figures as given out by the Census Bureau which is now completing its work at Washington, D. C. That is a pretty big family for Father

Knickerbocker to take care of, and especially in summer, when most people feel the necessity of a trip to the mountains or the sea.

It is estimated that over one-half of the population of Greater New York seeks the country in some way or other during the hot weather. The populace goes away some time between the months of April and July

Colossal transportation figures of the week's business (beginning September 5), with the railroads running into New York City.

Railroad.	Extra Passengers Carried.				Reg. Passengers.	Total.
	Trains.	Cars.	Baggage.	Persons.		
New York Central.....	178	1,424	136,940	252,600	240,000	492,600
Pennsylvania.....	125	1,000	97,800	68,000	120,000	188,000
Erie.....	47	329	12,750	19,740	90,000	79,740
Lehigh Valley.....	42	294	26,740	17,640	60,000	77,640
Lackawanna.....	14	140	15,781	8,400	76,000	84,400
Long Island.....	22	176	19,872	10,560	300,000	310,560
Totals.....	428	3,563	309,883	376,940	886,000	1,262,940

but it returns in a heap. Labor Day marks the end of the outing season, and on that day, and the day following, the railroads entering New York City handle an army of people.

The New York Central lines estimated that over 325,000 homeward-bound people passed through their gates on Labor Day of this year—and the majority of that number was recorded between twelve o'clock noon and midnight.

The New Haven and New York Central, in addition to its normal commuting traffic of 60,000 passengers a day, brought in 90,000 returning holiday folk.

The Seashore Division of the Pennsylvania in addition to its normal 20,000 incoming passengers, brought back about 24,000 who had been staying on the Jersey coast.

The Long Island Railroad, which through August carried about 50,000 passengers each way daily, had to transport 14,000 extra holiday folk, who have been spending the summer on the north or south Long Island shores.

Over 250 Extra Cars.

In consequence, the home-coming rush, which, according to railroad men, was the biggest that has ever followed a Labor Day in this city's history, did all kinds of things to the time-tables, and strained railway equipments to their fullest capacity. The Central and New Haven had to put on 253 extra cars. The Long Island had to run eighteen extra trains of ten cars each.

The Pennsylvania, on its Seashore Division, tapping Asbury Park and the other Atlantic Coast resorts as far as Point Pleasant, had to put on thirty additional trains. Most of these were made up of the Pennsylvania's new steel cars, seating 88 passengers each. There were from eight to eleven of these cars in each train which pulled into the Pennsylvania train-shed.

The Adirondack Express, which runs from the Thousand Islands to New York City, perhaps broke the record for passenger-trains, so far as size is concerned. This train was sent over its route in sixteen sections.

The first arrived at the Grand Central Station on time, the sixteenth just four hours later.

New York Central officials, a week before Labor Day, found that the Adirondack Express would have to carry 12,500 passengers from the northeastern part of the State into

this city. To carry 12,500 passengers in the ten cars of which the Adirondack Express is made up on ordinary nights!

Big railroads don't have much trouble in meeting such problems. The New York Central simply said: "All those people want to get home in one day and it is up to us to get them home."

Over 12,000 in One Train.

The company, by telegraph and phone, got a line on about 150 drawing-room, sleeping-car, and day-coaches by evening. They divided these up into sixteen separate trains, and sent the Adirondack Express with its 12,500 home-seeking passengers back to this city in sixteen sections.

These sections had to be started five minutes apart. Passengers in the last section were consequently something like 1 hour and 20 minutes late in reaching this city. But this, the railroad company pointed out, was a lot better for the passengers than trying to crowd 12,500 into a smaller number of cars.

The Seashore Division officials of the Pennsylvania pleased its home-coming crowds mightily on Labor Day by doing something which might have tangled up a less well-organized railroad considerably and which puzzled many watch-holding passengers a good deal.

Feeling sure that the home-seekers would begin collecting at the various stations long ahead of time, the officials decided to run the 9.30 in nine sections and have the first of these sections start fifty minutes ahead of schedule time.

The Separate Sections.

Each section was made up of from eight to eleven cars, calculated to hold eighty persons each. The guards and conductors were also instructed to shout:

"New York train! First section of the New York Express!" unusually loud when the train entered a station.

Most of the holiday folk who were waiting on the platforms were so anxious to get home that they didn't take time to look at their watches, and scrambled aboard in triumphant ignorance of what the railroad had done to please them.

Many of the first section's passengers were startled when they reached New York City and saw by the clocks on the buildings that they had arrived here fifty minutes ahead of time.

The Pennsylvania Railroad had to run two additional baggage-trains of six cars each, on Labor Day, so numerous were the trunks the road had to carry. According to its officials, the New York, or Seashore Division, brought back twenty per cent more home-comers than it did after Labor Day last year.

The Long Island Railroad also carried more people home to New York than on any other Labor Day in its history.

"We carried 600,000 people out of New York City on July 4," said one Long Island official. "We didn't carry them all back again, but we carried back 880 pieces of baggage and between 1,500 and 2,000 boxes full of fish, crabs, and oysters, which our patrons had caught themselves.

"This also happens to be cauliflower time, and what room in the baggage cars that wasn't taken up with fish, contained vegetables. On Labor Day night, because of the rush, almost all our trains were from twenty minutes to one and a half hours late. There was not an accident."

Figures that Talk.

The crowd which waited for home-coming relatives in front of the bulletin board on the upper train-level of the New York Central's terminal was much pleased with the working of the automatic announcing system which the Central had introduced. Under this system, the number of each incoming train is seen by an operator in the Mott Haven observation tower. He telephones it both to the superintendent's office and to the operator at the Fifty-Fourth Street switching tower.

The Fifty-Fourth Street towerman is the king of the whole yard from the point of view of responsibility. His mind is trained to tell into exactly which one of the many sidings he can switch each incoming train. While he jams down a lever, an assistant telephones to the superintendent's office.

This office is equipped with an automatic writing device which communicates with the bulletin board on the upper track-level where the passengers' friends are waiting. The superintendent writes the news about each train on a pad, which is part of this automatic writing device. This writing appears on a similar pad beside the announcer on the upper track level, who in turn writes it with chalk on the bulletin-board.

"This has been easily the largest Labor Day traffic we have ever had," said a New York Central official. "We carried in 150,-

000 people this morning, and since Friday have brought back 650,000. Since Friday we have had to put on 720 extra cars. We brought back almost as many people on Saturday and Sunday as we did last night and this morning. New Yorkers are beginning to understand the inconvenience of all trying to come home on the same train.

A Mountain of Trunks.

"In three days the New York Central has brought in 30,000 pieces of baggage, and the New Haven Road has done likewise. This has kept our new automobile baggage-trucks, which carry twenty-five pieces of baggage a trip, busy all the time."

"You must take in a lot of money from all these passengers," I said to one of the railroad officials.

"Yes, we do," he replied, "but we have use for it all. The railroads are employing nearly 1,800,000 people to-day, and if you count in the families that are dependent on these employees it is easy to estimate that we are supporting a big percentage of our population.

"The biggest business in the country to-day is railroading," he went on. "There are 2,500 roads now in operation in the United States, and if they could hoard the money they gather from day to day, from freight and passengers, there wouldn't be a dollar left in the country at the end of a year. Every piece of metal and paper currency in the country would be in the railroad treasuries. The railroads earn in a year five times the whole world's output of gold; thirty times this country's gold output; they take in four times as much money as the Steel Corporation, five times as much money as the government itself—more money than is represented in all our trade over seas.

Seven Millions a Day.

"It's a big business that takes in \$2,600,000,000 in a year. This is \$7,000,000 a day—\$7,000,000 a day!

"And \$3,500,000 of this money, every day of the year, goes into the pay-envelopes of the workers. For half the money gathered in by the railroads—half of this \$2,600,000,000 a year—is the workers' share of the biggest of American businesses.

"So in two years the railroad workers receive in their pay-envelopes as much money as there is in circulation in the whole country!

"Big figures, these! There is the humble trackman, usually an alien from the slums of Europe, who doggedly obeys the orders of the track-foreman. Out of every \$100 gathered in by the railroads, \$6 goes to him—five times as much as goes to the railroad officials. The figures are big, you see, whether you start from the bottom or top.

"Workers actually get \$50 out of every \$100, for from the \$25 paid for materials—rails, cars, engines, buildings, etc.—\$10 goes to workers in these industries. Every time you spend a dollar at a railroad ticket-office or freight-office, you are paying 50 cents for wages.

"The pay-roll of the United States railroads amounts to a billion dollars a year.

"When you look over this billion-dollar pay-roll, you get an idea of the bigness of railroading. Take the smallest item there is—\$28,000,000 paid in wages to telegraphers and dispatchers, an army of 40,000 men at the key. This is more money than all the telegraph companies in the country spend in wages.

What Goes to the Workers.

"Perhaps the largest item is \$210,000,000 in wages to shopmen. You know, perhaps, that railroads have shops, where they mend broken wheels and put new paint on cars. On the New York Central, climbing up the hill out of Albany, with the help of a snorting 'pusher' on behind, you may have noticed a group of brick buildings—the West Albany shops. Or, going over the Pennsylvania, your attention has been attracted, perhaps, to the Altoona shops.

"But did you ever know that the railroad shops of the country employ an army of 350,000 men, earning \$200,000,000 a year in wages? This repair end of the railroad business is bigger than the business of the Steel Corporation itself—more men and more wages.

"The army of shopmen has a big job. In the shops of the big railroads locomotives and cars are built as well as repaired. The smaller roads buy their equipment from the independent builders, but there is no road so small but that it has its shops for repairing equipment.

"The railroads own 2,200,000 cars—of which 50,000 are passenger-cars. Made up into one train, these cars would stretch around the earth, and to every fortieth car there would be a locomotive, for the railroads have 55,000 in service.

"You could carry every man, woman, and child in America in this train, allowing only forty passengers to a car. It's the business of the third of a million shopmen to keep these two and a quarter million cars and locomotives in running order.

Armies of Toilers.

"A bigger army still is that on the track—430,000 men, made up of 45,000 section-foremen—the bosses—and 385,000 humble workers, the lowest paid men in the service, averaging \$8 a week. But they take \$6 out of every \$100 of railroad revenue, or \$150,000,000 a year, and no small part of this money finds its way back to the old country.

"Many a good American citizen of to-day earned his first money in this country as a member of a track-gang."

"How about the expenditure for operation?" I asked.

"The railroads spent for operation last year," continued my informant, "the enormous sum of \$1,750,000,000. Of this sum, \$970,000,000 was spent in running trains, and over \$7,000,000 in maintaining road-bed and equipment."

This official gave me the following facts:

"Included in this billion and three-quarters is the billion-dollar pay-roll. The other three-quarters is spent on various materials, coal and steel being the principal items. The coal bill for the locomotives is the largest single item—\$185,000,000.

Besides the Coal Bill.

"Besides the coal bill, there is spent for locomotives \$10,000,000 on water, \$6,000,000 on oil, tallow, and waste, and \$4,000,000 on other supplies—more than \$200,000,000 in all. The tie bill is big—\$40,000,000; bigger than the rail bill—\$25,000,000. Stationery and printing costs \$14,000,000; advertising, \$7,000,000; wrecks and other damages, \$22,000,000; clearing away wrecks, \$5,000,000; killing and injuring people, \$18,000,000; insurance, \$7,500,000—and so on through a score of items, all in the millions.

"How much the railroads spend on steel products can only be guessed, but considerably more than half the products of the steel mills are bought by the railroads. The steel industry is prince or pauper, according as the railroads are buying freely or not of their products.

"When the railroads give out orders for rails, cars, locomotives, bridges, structural

steel, and other products of the steel industry, there is a boom, and when they stop buying there's depression, railroading, steel-making, and coal-mining going hand in hand. They are the three great businesses that make Pittsburgh the greatest industrial town in the world.

The Bondholder's Share.

"The railroads pay out of their revenues forty per cent for wages, twenty-five per cent for materials, etc., and three per cent for taxes, and then there is still left thirty-two per cent of the revenues. The creditors—that is, the bondholders, spread all over the earth—owning \$9,000,000,000 of American railroad securities, get thirteen per cent of the revenues. This nets them only 3.7 per cent on the par value of their bonds. There is still nineteen per cent left. Of this, twelve per cent goes to the shareholders—the half million owners.

"They receive \$300,000,000 a year out of the \$2,600,000,000 earnings, which nets them only 3.6 per cent on their \$8,000,000,000 of stock. The other seven per cent of the earnings goes into surplus.

"The train-crews, with 320,000 engineers, firemen, conductors, and trainmen, make up the third largest railroad army; but they head the wage list with \$285,000,000 a year. They get more than a dollar out of every ten received by the railroads.

"The railroads earned last year, gross, \$2,600,000,000. The small end of the railroad business is the passenger traffic. The receipts from 900,000 passengers were \$570,000,000. The average rate paid was a trifle over two cents a mile.

Dealing with Passengers.

"When a person pays for a thing, he expects to get full value for his money. That is just the way members of the traveling public feel, who pay to ride, and for what the company advertises to give them—namely, courtesy and attention from employees, with *good service*, so it is 'up to us' to live up to this agreement.

"We should live up to the rules regarding making up trains, and see that everything is in good order; that the air is tested properly; that vestibule curtains are hooked up; and that a gate or chain is at the rear end of the last car, to keep the passengers from falling off; and also that the cars are *properly ventilated*.

"We should regulate the steam-heat—shut

off or put on, as may be required; be sure the floor-valves are closed; put cups at the drinking-tanks, and see that they are *clean*. The traveling public will appreciate it if, when we do this work, we do it right.

"When passengers get on or off your train, assist them—especially elderly people, or women with small children; if they have suit-cases, or folding go-carts, put these on the train. If any passenger asks you a question, *answer it pleasantly*—always speak as you would like to have *them* speak to *you*.

"If working on a through train, be sure that people getting on are getting the *right* train. After yours leaves its terminal, close all the doors and vestibule traps, and unlock the toilets; be sure your aisles are clear of suit-cases and packages, so that passengers getting on or off the train will not fall over them.

"When your train is running between stations, go through the cars and see that they are ventilated and heated properly, and if any of the passengers want anything, such as a seat turned, or a chair lowered, or *any* little favor, do it as if you were *glad* to do it.

This Is What Pays.

"Before going into a station, on a through train, go through the cars, pulling the checks, telling the passengers when the next station is theirs; and if they are asleep, wake them up, always giving them plenty of time to get ready before arriving at their destination.

"On arrival at the station, go into each car and announce the station *so as to be understood*; repeat your call from each end of the car, and assist the passengers getting on or off the train. When you get through loading, go along the outside of the train, looking out for hot boxes and see that your brakemaking is all right.

"Remember in conversations with passengers, answering questions, or when a passenger is angry about something which does not concern you, but he still tries to 'take it out' on you, or says something which you do not like, do not lose *your* head; don't get excited—keep cool—and you will win out *every time*.

"If you are in the wrong, you know what the rules are, and what the consequences will be. We all make mistakes—the best of men do—but if you make one once, try *not* to make the *same* one *again*. Be generous and kind-hearted, and remember courtesy wins friends, for yourself as well as for the company."

BUTCH POTEET'S BRIDE.

BY EMMET F. HARTE.

Honk Invents a Panoramoscope, and, with the Aid of Horace, Proves That Love Will Have Its Way.

HONK threw down his newspaper and sighed like a November wind in a weeping willow. I waited with a card poised for almost a minute, expecting him to voice his mood in appropriate words—but he didn't. "Well," I said, "what's eating you?"

He snorted equinely, and awoke from his reverie.

"Heigh-ho!" he yawned. "Valhalla's too serene. It's as still as a vacuum all over. Everything's jogging along so slick and noiseless it makes a fellow lonesome. If something'd just go wrong, so I could fix it, I believe I'd feel better; but there's not even a dog-fight to stir your pulse. What my soul craves is excitement, action, clamor—"

"Try the solace of solitaire," I suggested. "There's another deck over there on the window-sill. The flower-garden is a thriller. Or, let me play you that stirring melody entitled 'I'm Afraid to Come Home in the Dark.'"

He shook his head.

"I guess I'll finish up my panoramoscope," he mourned. "I don't seem to take no interest in anything you mention. Gimme a little nip off that plug."

He filled his face with the weed that soothes but does not inebriate, and got out his junk collection.

The thing he was concocting, and which he referred to as the panoramoscope, was a black box about the size of a cracker-case, filled with lenses, mirrors, and clockwork mechanism. When finished, he expected it to do marvels, and it was all completed, with the exception of a couple of lenses for which he had sent East.

The lenses had arrived that day, and he was ready to put the finishing touches on his contraption.

"This little contrivance," he remarked presently, while at his tinkering—"this little contrivance; now, is quite full of possibilities, don't you know. I'll fix up a lookout on the roof of the car, where the view is extended, and the surrounding country within a radius of thirty or forty miles will be brought under our surveillance.

"It will enable us to keep in touch with local happenings, conditions, and affairs to their minutest details. I will be the general directing his troops. I install this machine in my conning-tower, seat myself comfortably, gaze upon the polished face of this screen, and what do I see?"

"You see a stately fleet of ships flying your pennant, at anchor in the bay," I ventured, "or a Nautch girl doing a cheap imitation of Salome, or a dark-browed man coming with an armload of bombs to wreck the city. A-ha! The scene changes. Note the swirling unrest! The luminous haze! The transformation! Now the picture is materializing. It is the moment of fate—"

"Stuff something in your mouth!" said Honk. "This is no fortune-teller's trick-box! This is a scientific instrument built to catch and register light rays. It is a powerful telescope, refracting mirrors, reflectors and projectors, assembled and focused to bring distant objects to your elbow. For example:

"You are forty-three miles away, over there toward the east, we'll say. You are slouching along in your usual way. I am watching your motions on this screen. I see your shoe is untied; you stoop to tie it. I note your bored expression. The string is in a hard knot. I watch you jerk it. I see your lips move. A fly alights on your coat-sleeve and preens his wings—"

"Have I got my bicycle with me? I'm not away over there on foot, am I?"

"I'm explaining this instrument," said

Honk. "You set it up where the view is unobstructed, wind the clock, and lean back. Every minute detail of the surrounding country is revealed to you in a slowly moving panorama on this screen. It is a telescope and periscope combined—only better, much better. A bird pecking at a cherry twenty miles away; a man plowing in a field thirty miles distant. You can tell whether his eyes are brown or blue; you can even see the freckles on his nose."

"It's great!" I said, with admiration. "It's the one thing that's been lacking in rural communities. Every Mattie in the country, from Augusta, Maine, to Los Angeles, will have one regardless of cost. It beats listening over a party-line to a thin batter. How much will it sell for? I'll take the agency for Ohio, Indiana, Kentucky, Illinois, Missouri, Iowa, Kansas, Nebraska—"

"It won't be for sale," Honk said shortly. "No invention of mine will ever be subverted to base uses."

"Oh, that's all right," I reassured him. "I knew you would not sell it. You're afraid somebody might have some fun out of the thing." I shuffled the cards again.

Honk had a sort of bird-cage rigged up, next morning, and hoisted to the roof of the Medicine House. In this aerie he set up his panoramoscope and a chair, and, as the siding in which the car sat was on reasonably high ground, we had a fair sweep at a section of the map about the size of New England.

The fruit-farms, the beet fields, the highways in all directions, the inhabitants of Valhalla and its suburbs to the second and third generations, all came under his espionage. If a careless housewife threw a tin can in the alley, or dumped soapsuds where they

would run athwart her neighbor's back yard, Honk saw it.

If a workman paused to light his pipe and enjoy the scenery during the brief absence of his foreman, there was Honk taking it all in, even to the number of missing buttons from the loiterer's shirt. One mile or forty didn't cut any figure.

If a peach-grower pruned a tree that didn't suit Honk, although away beyond his horizon, he set up a howl about it. He took the burden of all the little dirty-faced kids in that section upon his shoulders.

"That woman in the drab-colored house across the road from What-his-name's has got four of the worst young 'uns I ever did see," he remarked at noon. "They wrote all



THE RUBBERNECK HABIT
GROWS ON YOU BEFORE
YOU KNOW IT.

over the side of the kitchen with chalk this morning, broke down the front gate swinging on it, hung a cat to the clothesline, pulled every flower she had blooming, and made mud pies on the front porch.

"Say, but she walloped 'em, though. If it'd been twenty miles closer, I could have heard 'em yelp. One got under the house before she got to him. He's under there yet."

"If I had your taste for household worries," I said, "I'd get ma set of knitting-needles and go visiting. Why don't you take out a membership in a sewing circle?"

"Come up and take a look around," he invited. "You're getting in a rut down here with your snoot on the oilstone all the time,

Horace, my boy. Come up and see the busy world about you."

I piled the dinner dishes in the sink, and did so. The panoramoscope was all he had claimed for it. In ten minutes I had become engrossed in the graceful movements of a couple of girls, who looked to be about the age of eighteen, and who were picking cherries some fifteen miles to the southeastward. One of them fell out of a tree.

There was also considerable excitement when a woman and a small boy tried to chase a pig out of a corn-field eight miles to the north of us. The rubberneck habit grows on you before you know it. I eagerly swept the surrounding country with the unselfish interest of the lady across the street when you move into your new house.

Honk descried a man loafing in the shade of his shack at four o'clock, who, he said, had been idling away the whole day. He'd been doing that same sort of heavy sitting since ten o'clock, Honk said, and anybody could see that the weeds were taking his strawberry-patch.

At length Honk called the fellow up over the telephone and inquired solicitously about his health. Wasn't he feeling well? He said he was. He was feeling finer than imported

silk. He explained that it was a boy, and weighed twelve pounds.

But life is not all girls wading in irrigation ditches or chickens scratching up the neighbor's gardens. Even while we are admiring the gentle shower that makes the little posies smile from ear to ear, the thunderbolt crashes with a rip and a roar, sets fire to your haystack, and kills your best cow.

The tragic so closely presses on the heels of the trivial, that oftentimes you open your mouth to guffaw and end by yelling "ouch."

So, in this connection, and proving that the foregoing hypothesis is no mere figure of speech, Butch Poteet fell in love with a farmer's daughter who lived three miles from the power-house.

Butch was riddled in the southern exposure of a new pair of five-dollar trousers, with mustard-seed shot. The girl's father did it when argument failed to convince Butch that he was *persona non grata* besides being superfluous around that immediate vicinity.

The wounds inflicted, while scattering and of small moment, lacerated Butch's feelings frightfully; but he had no symptoms of an inclination to give up the girl—not him.

He limped up to the Medicine House after Doc. Pillsbury got through with him—by the way, isn't that a gruesome name for a physician to have? I've mentioned it to Doc. once or twice, but he says he can't see anything wrong with it.

Butch came up to tell Honk and me all about his troubles. He used to be a hind brakeman on the Peavine division—no, that has no connection with the shooting.

"We're made for each other, Ernestine and me," he said. "Never was two people any more pals than us. But that old man! Rats in the cab-



"I PROMISED HER THE OLD GENT
WOULD SEE A SPOOK, ALL RIGHT."

bage-patch! That old man o' hers is a savage! What's he got ag'in' me? Nothin'! Ain't I white and free-born, and smart enough and good-lookin' enough and got money saved in the bank, and all my bills square to date?

"No; he's sore because, if Ernestine and me was to up and get married, he'd lose the best worker he's got on his place, that's it! She knows it, too, and it's a wonder to me she'll stand for it!"

"The mental malady known to science as acute sentimentalism, or, in its earlier stages, as puppus affectionitis," quoth Honk learnedly, "is a queer manifestation of the erratic human mind. I speak from no intimate knowledge of the subject—"

"Haw, haw!" I said.

"I dare you to deny it," he flared, fixing me with a baleful eye and reaching for a monkey-wrench. I maintained a hurt-silence.

"Yes," he continued. "Love is a disease. It is caused by germs, like croup and colic and *la grippe*. It has a remedy, however; sharp medicine, but a sound cure, as Sir Walter Raleigh said of something else, once upon a time. The remedy is to marry the girl," he concluded sonorously.

"Or have her take off her wig," I added. When order was again restored, we resumed the discussion of Butch and his prospects.

"You say you are in love with this Miss Ernestine?" said Honk. "What's her last name? How old is she? Why haven't you reported the matter before this?"

"Yes, I love her something fierce," said Butch, answering the questions in order. "Her name's Barker. She's twenty. I haven't had no chance to tell you fellers about it because I've been too busy. You know I work nights at the power-plant—"

"Yes," said Honk. "We'll let that pass. You want the girl; and you have money in the bank. How much?"

"Thirty-five dollars," said Butch proudly. "And, what's more, it's drawing interest, too."

"Did you get that, Horace? He has thirty-five wagon-wheels, each drawing interest. Make a note of that. This young man is a financier. He'll have a corner in money before you save enough to get a new suit."

"Let's go up and find out if we can see Butch's girl in the panoramoscope," I said. "Maybe we can figure out a scheme to bring old man Barker around, while we're resting."

We clattered up the ladder, trained the muzzle of the machine in the direction Butch indicated, and found her.

She was sitting out under a lilac-bush in

the yard, sniffing to herself. Wasn't a bad-looking girl, either, though a bit red-nosed and blear-eyed under the circumstances. I felt sorry for her—oh, this is a tragic story, all right—and if I, a cynic and a scoffer, felt sorry, picture the frenzied madness of Butch when he saw those scalding tears; and the wrenched heart of Honk, who is as motherly and sympathetic an old ruffian as ever cuddled a kitten—although he won't admit it.

"Now, wouldn't that jolt you?" said Honk, after Butch quieted down. "Look at that poor, forlorn young woman out there heart-broken, Horace. Ain't that a shame? Crying, Horace, crying her pretty eyes out."

"Well," I said, "why don't you do something? You are all the time blowing about what you can do—"

"We'll go out with him instantly and get her," he said decisively. But Butch declared that that move would buy us nothing.

"I've been trying to persuade her to run away with me for weeks," he said; "but she won't fall for no elopement. If her dad don't come through with his O.K., why, it's all off, that's all."

"Wonder what she'd do if we could flash Butch's picture there in front of her, life-size?" I said.

"Hold it! Hold it!" Honk shouted. "I've got an idea! Help me down with this machine to where I can work it out. I'll have to take the panoramoscope to pieces! Great! Ha! Why not? Of course it'll work!"

Keeping up a patter of unintelligible comment, he led the way into the car, which was also our workshop and scientific experiment station.

I am much addicted to levity and persiflage, both in and out of season, but I always give Honk credit for the spasms of genius by which he is overtaken every now and then—and this was one of those occasions.

"Don't speak!" he cautioned us. "Don't even breathe! Let me do all the talking. I am pursuing an elusive and impalpable figment of thought across the boundless wastes of science"—he was dismantling the panoramoscope as he prattled. "What goes up must come down. It's a poor rule that won't work at least two ways. A powerful light behind it, thus. The reflected image projected outward instead of inward. Stand over there just a trifle, please. Horace, connect me this wire to the light-socket. Ha! Now, what do you think, eh? How's that?"

The fact was, we had two Butch Poteets in the Medicine House at that moment. The real Butch, with hanging jaw, stood where I



SHADES OF ALL THE FOOTBALL HEROES,
WHAT A KICK.

could almost touch him; and the bogus Butch, the reflection, mirage, specter, or conjured image, of the same size and identical expression, stood down toward the door, with his jaw hanging in the same manner. It took steady nerves to tell which was which.

"Great!" said Honk. "Stupendous! Lift your arms, old scout!" Both Butches executed the movement in perfect unison.

"All right. Cut her out, Horace!" The figure nearest the door melted into nothingness. For once in my mad career, I was overcome with emotion. I was actually in a perspiration.

"The thing is as good as done," I heard Honk saying. "We'll have you commit suicide in the reservoir after writing this old man Barkuss of your terrible resolution, and then we'll haunt him until he'll wish it had been him instead."

"But—but—" said Butch, "I don't really want to commit no suicide, you know—"

"Certainly not," returned Honk. "Cer-

tainly not. Your mania runs more to the homicidal. But you're only supposed to, you understand." Butch looked greatly relieved. "Get him a pencil and some paper, Horace. Now, write this old man as I dictate."

He reeled off a message wherein the morose and despondent Butch heaped reproach and invective upon the instigator of his woes, swore a dreadful *post-mortem* vengeance by promising to haunt the irascible old gent to his lasting sorrow, and ended with an almost audible splash in the lake. This was sealed, stamped, and dropped in a letter-box so that it would be delivered that day.

"Now," directed the master of ceremonies, "it will devolve on Horace here to wheel out and get a word with Ernestine.

We don't want to worry her unnecessarily. We are not hungering for any real suicides."

"You go," I said. "Or let Butch. I wouldn't know what to say after I got out there."

"I'll tell you what to say," said Honk curtly. "You take this bike and skiddoo. See her on the quiet, if possible; if not, go boldly up to the front door and call her out. Tell her she's been elected treasurer of the

Sunday-school or something, and whisper your real message.

"Tell her we're going to conjure spooks after her dad until he repents, and whenever he does—wait a minute, I've got another idea. We'll have Butch talk into the phonograph—where's that box of blank records, Horace? We'll have him tell the old man that the only terms under which he can lay the specter will be to consent to a marriage between his daughter and the astral shape of her lover.

"You can take the phonograph out with you and set it off at the psychological moment."

"Yes," I said, "and get what Butch got, maybe. I'm not shot-proof, or even fond of being shot at."

"Use your wits," said Honk. "Forewarned is forearmed, and all that sort of thing. Duck. He'll not be shooting at you. Horace, you act like a nervous child. Brace up, and get in the game. I never knew you to show the white feather before."

"All right," I said. "I'll be the goat. If anything happens, send my watch to my married sister in St. Louis; you can have my new patent-leathers."

Laden with the phonograph, a case containing ten sensational graveyard records, and a fresh plug of chewing, I trundled my hoop out to the Barker homestead just after twilight thickened into the gloom of night.

Honk had focused and adjusted his spook-box, strung his wires, and installed his apparatus during the afternoon. He had computed and chalked the exact spots where Butch was to stand, so that his figure would be projected to the Barkers' front gate, walk up the path, ramble around the yard, peer in the windows, and everything, just like a *bona fide* ghost.

I hid my part of the manifestation under a burdock-bush down the road and pedaled boldly up to the front fence. There was no moon, but the starlight made a sort of a hazy glow. Fortune smiled on me. Ernestine was hanging on the front gate all by her lonesome, grieving for her lost lover. The rest of the Barker family were eating supper in the house.

I never talked so fast in my life. I did an hour's explaining in ten minutes. I had to. She was a big help, though—she had quick wits. It didn't take me one minute to

find out that she was away yonder too good for that lunk-head of a Butch Poteet; but, of course, as I had enlisted in his cause, I had to boost for him.

She said the old man had received Butch's letter with hoots and jeers. He said he'd make any ghost that lit around that place hard to catch. I outlined the plan of campaign, and told her to keep calm whatever happened.

I promised her that the old gent would see a spook all right and more, and that his shotgun would not harm anything except the lawn and the shrubbery. I further pledged her my word that she and Butch Poteet would be married in the parlor, with old man Barker's hearty consent, before the week was out. I said I'd bet on it.

Her nose was swollen and shiny with weeping, but she was smiling when I mounted my wheel to glide away. I made up my mind that the first chance I got I'd make some pearly-toothed young damsel cry about me. It's very poetic.

The old lion stamped out on the porch and brayed—does a lion bray?—just as I got safely away, unobserved.

"Ernestine!" he yawned raucously. "You come in this here house! Standin' out there sniffin' in the dark by yourself. If that feller's drowned hisself, like he said he was



THE SPOOK EVEN GAVE
THE COWS SUDDEN
DELIRIUM.

going to do, it's a good riddance. A consarned good riddance! He never amounted to nothin', an' he never would have amounted to nothin'—do you hear?"

"Yes, pa," she replied meekly. "I'm coming in."

"You better," he said, "an' eat your supper like a girl with sense. An' help your ma with the dish-washin'."

He sat himself heavily on the porch and got his pipe to going. Meanwhile the katydids started up their rattling zig-a-zig.

Luckily the Barkers didn't have any dogs. Dogs would have interfered seriously with my part of the work. I sneaked through the fence, crawled on my stomach behind bushes, and set the talking-machine up in a dark clump. I muffled its horn with my coat to enhance the sepulchral effect, and I had a wire cut-off arranged so I could start it or stop it at my pleasure behind an adjacent tree.

It wasn't a very big tree. It didn't shield me entirely, not even when I hid edgewise. I wished it might have been one of California's famous redwoods, but it wasn't. However, it was better than no tree at all.

I had everything in readiness, and was comfortably squatted, when Butch appeared at the front fence. I thought he flickered a little at first, but the light was uncertain. He melted through the front gate and walked boldly up the path toward the smoker on the porch without a crunch or a bobble.

Could you see him? I should say! He was as real as flesh and blood. Every feature was distinct, from his slouch-hat to the sag of his trousers at the knees.

He stopped, raised his finger, and pointed it toward the old man. I pulled my wire, and a weird, hollow voice, sounding like it came from under the ground, said: "Barker, I have come!"

The old man was game—gamer than I'd be under the same circumstances. He made two steps and a kick—shades of all the football heroes, what a kick! It went entirely through Butch and jerked the old fellow off the porch. He alighted on his shoulder-blades.

I pulled the string, and a peal of mocking, shivery laughter burst forth. It was a triumph for science. The ghost walked a few steps sidewise. The old man gathered himself up and made a bee-line for the house. Slam! bang! went the screen-door. Then out he came, with his gun in his hand and murder in his eye.

Butch stood ten feet away, grinning airily. The old man took aim and let fly both bar-

rels. It made an awful din. I worked my wire, and the graveyard voice said: "Barker, you are a fool! Ha! Ha! Ha!"

Butch came right up to the step and pointed his finger again in the old man's face. "No rest will you get," he said hollowly, at my direction. "I will make your life a burden to you!"

The remainder of the Barker household had rushed to the door when the artillery went off—the old lady and two or three kids of various ages; also Ernestine. They all took a look at Butch's spook and set up a scream. Work in enough screams on the side, and it takes a dandy to keep his calmness unruffled. Old man Barker was rattled completely.

"You git out of my yard!" he roared. "I'll—I'll—"

The voice said: "Barker, you are a fool! Ha! Ha! Ha!"

Butch's girl rose to the occasion and ran out to embrace him like they do in the moving-pictures of "Daisy, the Village Belle." He made mighty thin hugging.

When they saw her go through him, miss him, and grab all over where he was, and never touch him, the rest of the family made one of the rowdiest retreats I ever saw. They retired in a rout, the old gentleman with them, thoroughly awed. Ernestine followed, after heartrending appeals from the younger members, and went in, trying to wring her hands, and saying:

"It's Fred! It's Fred!"

"Fred" being Butch Poteet's nom de apron-string.

The shade of the aforesaid Fred stood around rather aimlessly for ten minutes or so after the haunted folks had gone inside, barricaded the door, and wouldn't look out. I seized the opportunity to move the phonograph nearer to a window, and put in a new record. When I started it off that time there were moans, gurglings, and chokings that made even my blood curdle.

Just then Butch came wafting up and peered in at the same window. Down went the blind! Then I sneaked up and ticked on the glass with a penknife, at the imminent risk of getting shot. You have to take some chances, however, to make a good showing at a séance. Every now and then you read about a medium getting acid squirted on him or something.

I found where a pane was broken out after a while, and gave them my full repertoire of ghost talk. I told the old man that his only salvation was to consent to the wedding of Ernestine and the spirit of Butch, inter-

spersed with groanings and gnashings; told him he'd waken in the night and find icy fingers choking him, and all kinds of grisly things. We concluded the performance about eleven-thirty, with the enemy well bottled up and quaking in their beds, and I pulled my freight back to town.

It was no trick to put Butch over on Barker's front porch in the daytime, and it was simply a matter of adjustment to send him right alongside the old man when he went out to milk. The spook even scared the cows.

The starch was certainly all out of that militant old man by nightfall, you can reckon, and when I started out after supper to get in some more body blows with a new set of nerve-paralyzing records, I took along a blue rocket to send up whenever the old gentleman found that he had enough.

Ever see anybody have a nervous chill? Well, that's what Daddy Barker had when the specter oozed through the gate and came up to stand on the porch a while and point his finger after supper. They gave the old fellow smelling-salts and whisky, and wrapped him in a blanket, and you ought to have heard him chattering foolish stuff.

Whenever he'd show symptoms of warming up, I'd pass him a few chokes and gurgles through the broken window, and, at a quarter-past eight, he began to squeal for them to get a preacher and get it over.

"Yes—yes—yes! Let 'em marry!"

The blue rocket sailed heavenward a moment later, and the ghost disappeared so suddenly that I feared Butch had fallen off the car roof and broken his neck.

They came out in Doc. Pillsbury's automobile. Brought Doc. and a minister along.

Ernestine had faded away long enough to put on her best pinafore and roach up her hair a little, and she looked cute enough for any ghost to marry when the bridegroom arrived. If he hadn't arrived I would have seriously considered taking his place.

Doc. tinkered the old man up somewhat—gave him first aids, calmed down his hysterics, and all that—so he could wobble out



"THIS AINT NO GHOST!"

and give the bride away. Honk acted as best man, and we pressed one of the little sisters in as bridesmaid, and had a bang-up, swell wedding—as fine as anybody's.

When the handshaking-time came, the old man didn't rush up like the rest of us. Doc. Pillsbury called his attention to it.

"Go on," Doc. said. "Show the boy you've got no grudge against him. Give 'em the glad paw of congratulation and wish 'em all kinds of good luck."

The old fellow tottered up, with his blanket around him like the big chief of the Wasatch, and reached for Butch's talon like it was painted on the wall. It was warm and human and alive, he found.

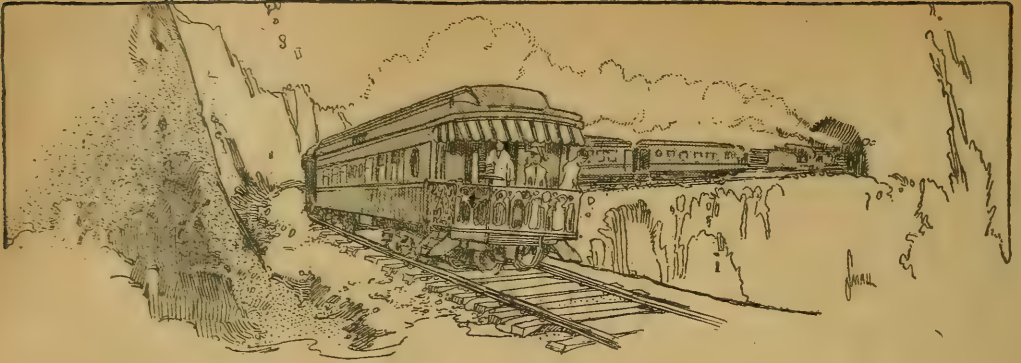
"This ain't no ghost!" he brayed.

"You bet not!" said Doc. "I want you to understand I'm that boy's physician, and he's a long ways from being a ghost!"

"I'll jest be consarned!" ejaculated the old man. "An' you didn't drowned yourself? That's too bad—I mean, I'm glad you didn't. All right, Poteet, she's yours. Take her."

Honk and I were sitting quietly in the Medicine House, an hour later, the stir and clamor gone, the shaded electrolier shedding its mellow glow on our slippered feet, and our high-strung nerves relaxed and purring.

"Thirty-five dollars," he mused. "Thirty-five dollars! And then you beef about the high cost of living."



On the Inspection Special.

BY CY WARMAN.

Observations of an Official Tour Across the Dominion of Canada, Which Shows the Wonderful Workings of the Machinery That Operates a Modern Railway.

I HEAR the whistle sounding,
The moving air I feel,
The train goes by me, bounding,
O'er throbbing threads of steel:
My mind, it doth bewilder,
These wondrous things to scan,
Awed, not by man, the builder,
But God, who made the man.



T the rear end was the "Bonaventure," the official car of the chairman of the board. In front of the "Bonaventure" was the "Canada," the president's private-car.

Next to it was the "Ontario," the wheeling workshop of the vice-president; then the "Algonquin," the traveling headquarters of the general transportation manager; noted for its long runs and short stops; then the "Carrizo," a compartment-car for the heads of the various departments, and for the guests of the chairman and the president; and last, near the engine, was the special commissary-car, ingeniously arranged, with a large kitchen in front, a dining-table in the center, and space for baggage and sleeping-berths.

This, in addition to carrying the stores, made a home for the crew, which was leaving Montreal on August 9 and returning Sep-

tember 22, on a forty-four-day tour of the Grand Trunk Railroad.

The man in the field, gazing at the flying train, says, "There go the 'Sons of Mary'," but he does not know. Scarcely have we cleared the switches, when the bright young men—secretaries and stenographers—begin to busy themselves with their baggage. They unstrap the great accordion-pleated bags, in the various pockets of which are to be found the voluminous correspondence on some subject or problem which had to wait over until they were out on the road.

A Conference on Wheels.

The heads of all departments are here on this special train. At several points along the road we pick up division superintendents and master mechanics. These travel to the end of their respective divisions, and are replaced by others all along the length of the entire system.

Within an hour after leaving, everybody is busy. Instead of making it a pleasure trip, the heads of the departments seize this opportunity to clean up. The train, for the time being, becomes the "Oyster Bay," the "Beverly," or the "Downing Street" of the

administration of the whole railway system. Now the freight-traffic manager confers with the general transportation manager as to the best method for handling the harvest that will soon be coming down from the Northwest.

The passenger-traffic manager discusses the new equipment for the International Limited, while the head of the motive-power department talks over with a division master mechanic the new methods of paying by the piece for work in order that each man may have something to strive for, and, incidentally, to enable an expert in any line to earn more money. The superintendent of the car department—the man who bosses the building of the equipment—comes along to show the official party through the various shops on the system. Then there is the chief engineer, into whose work comes the question of policy, and sometimes politics. Meantime, the president confers with the chairman as to new lines, extensions, etc., conversing in millions.

Car-Window Sketches.

It was a typical Canadian morning. Up to our windows came the smell of clover as the magnificent train swept up the twin-tracked highway. For six or seven hours our trail lay along the banks of the St. Lawrence and the shore of Lake Ontario. It was harvest-time. Men were busy in the fields, and carters were hauling in the hay.

Reapers reaping in the shocks
Of gold, and girls in purple frocks.

To the right were the rolling uplands, where larks were lifting from the mown meadows. To the left, beyond the wide St. Lawrence, lay the peaceful shore of a foreign country, watching with growing interest the evolution of a colony to a nation.

We had pulled out at 8.15, and now it was noon. Presently, while this peerless panorama slipped past, we lunched, loafing along at a mile a minute. Our special was timed to reach Toronto, the provincial capital of Ontario, at 4 P.M., and when we stopped in the station the big clock in the depot tower was striking four.

We were now three hundred and thirty-three miles west, and had changed engines but once. An item of interest is the fact that these locomotives were designed by the head of the motive-power department, and made in Canada.

From Toronto we dropped south along the

7 R R

west shore of Lake Ontario for forty miles, through a corner of "the garden of Canada," to Hamilton, and swung westward along the beautiful valley of Dundas, tying up at twilight at Stratford, where the big shops are located.

A kind Providence had arranged that the Avon should flow by Stratford, and the master mechanic had provided a brass band—and a very listenable band it was—composed of mechanics from the shops.

The Stop-Over at Stratford.

After dinner our cars were cut and shuffled and set in on the shop-yard tracks, near the band stand, which stood by the Railway Y. M. C. A., amid beds of flowers. A gentle rain drove us early to our twelve-wheeled homes, but far into the evening the air was full of melody and the odor of sweet peas.

Next morning the whistle blew in a whisper, and we woke to see the sunshine drying the eyes of the daisies.

After breakfast the master mechanic introduced us to the shops and the mayor of Stratford. They are wonderful—the shops at Stratford. We saw a car of coal stop by the power-house. One man pulled a lever and let the coal drop into a bin, whence it was scooped by half a hundred buckets, traveling on an endless belt, and dumped into a great hopper, from which it flowed through iron pipes to the traveling grates below the boilers, and burned, the ashes falling into an ash-pit as the endless grates rolled round and round.

We saw immense traveling cranes pick up a one-hundred-ton locomotive and carry it away, hundreds of feet over the tops of other engines, as an eagle would carry away a chicken, and set it down at the other end of the shop. We saw nippers nipping off the ends of seven-eighths steel bolts and spitting the bites onto the floor. Powerful steam-hammers were hammering great bars of iron, and in the lathes wheels were being turned down, the steel shavings from which were purple with heat.

A Split-Up at Sarnia.

At noon of the second day we were at Sarnia, where the line dives through an electric-lighted tunnel to the shores of the United States.

Here, on the American side, we inspected the big power-plant, whose machinery does all things but think. At Stratford the load

was uniform during working-hours, the demand on the machinery being the same throughout the day. But here it is different; at times the machinery is idle, then, in thirty seconds, the plant is called upon to move a thousand tons of traffic.

By an ingenious arrangement, working automatically, the fans start, the mechanical stokers stoke faster, the draft is furious, and in sixty seconds the fires are burning fiercely beneath the great boilers. Then, when the demand ceases, the machinery slows down, the blowers stop, and the fire cools to a steady glow, ready for the next call.

This machine seems almost human, each force or factor depending upon another. If one part failed to work, the entire plant would go out of business.

The Parting of the Ways.

Sarnia proved to be the parting of the ways. Here the chairman and the president, and the heads of all the departments whose jurisdiction extended over the Grand Trunk Pacific, as well as over the Grand Trunk proper, boarded the beautiful lake liner Hamonic, and sailed away up the lakes to

Fort William, where they would pick up the steel trail again, travel across the prairie provinces, cross the Rockies, and sail up Puget Sound, on the new steamship Prince Rupert, to the new city by that name on the north coast of British Columbia, the Western outpost of the British Empire.

As the Hamonic steamed out of the beautiful river, our special sped on westward, to be ferried across Lake Michigan to Milwaukee, and then on to Chicago, the great railway center of America and the western terminus of the system in the United States.

As our special sped over the west-bound track, with long manifest-freights and limited trains brushing by us, bound east, I stopped marveling at the mechanical devices and their interdependence, and began to muse upon the wonderful human machine that runs a railroad, built on a sure foundation of faith in each individual, interdependent but not interchangeable; for each man must be a master in his own line—bound together by a spirit of loyalty that is loftier than friendship, a fidelity to duty that is stouter than steel.

It is indeed wonderful, the modern machine that operates a railway.

MONEY IN LOCOMOTIVES.

Recent Earnings of Engine-Building Plant Show Heavy Increase Over Those of the Years Previous.

THIS year the American Locomotive Company's gross earnings of \$32,203,392 were \$13,194,758 larger than the previous year, and the net earnings of \$2,597,949 were \$1,255,277 heavier. This left a surplus of \$334,758 after paying interest on bonds and preferred dividends, whereas the meeting of these obligations resulted in a deficit of \$762,861 in 1909. The report shows that the balance of surplus for the year over and above 7 per cent preferred stock dividends was equal to 1.34 per cent on the \$25,000,000 common stock, as compared with nothing earned on that issue in the year previous.

W. H. Marshall, the company's president, says that during the first half of the fiscal year there was but slight increase in the monthly output, as compared with that of the preceding year of depression, the revival of plant activities being confined to the six months ended June 30, 1910.

About the time of this resumption in activity the agitation throughout the country for increased

wages spread to the company's plant, and this company, in common with other industrial and railroad companies, made substantial increases in wages of shop employees. As a large part of the output for the year had been sold at prices which did not anticipate the extent of such labor increases, there was a resultant decrease in the margin of profit.

President Marshall says that, to meet the constantly increasing demand for an economical commercial vehicle and, in view of the possibilities of this line of industry, the automobile department has devoted considerable study to perfect the design of commercial trucks. He also states that the company now has a most successful three-ton truck, and a five-ton truck has been developed and will be put on the market during the present year.

At the beginning of the fiscal year the company had unfilled orders on its books amounting to \$6,150,000, and on July 1, 1910, the amount was \$17,550,000.—*Railroad Reporter*.



DIRK JOHNSON'S BANK ROBBERY.

BY AUGUSTUS WITTFELD.

An Amateur Detective Gets a Hot
Clue but Fails to Reap the Reward.

DUGAN and Curran were watching with interest the work on the new iron bridge at Tacony. As the great iron crane swung a massive upright into place, Dugan voiced his approval of modern methods of construction.

"I tell you, Curran, it takes American ingenuity and American push to get things done quickly. Do you remember, back in 1901, when the American bridge-builders invaded Africa to finish up the construction of the bridges in Uganda, on the Cape-to-Cairo railway?"

"Can't say as I ever heard of it," replied Curran.

"What kind of hibernating animal are you, anyway?" asked Dugan. "Don't you ever absorb any of the history of your glorious country that is constantly in the making? When a handful of your countrymen leave home and mother, to take up temporary quarters and grow American garden-truck and American bridges in darkest Africa, I should presume that you would experience a few thrills of patriotism."

"What you talking about, anyway?" growled Curran. "I'm no erudite college professor."

"I'm talking about the country, where considerably less than fifty years ago there was only one white man registered, and he was mislaid. His name was Livingston. There was another man, named Stanley, of whom, I suppose, you never heard, who went out and found him and returned him to his anxious country. In less than fifty years the home of the ancestors of burnt-cork min-

strelsy has blossomed into a metropolis, and the natives, instead of dodging Tippoo Tib and other slave dealers, are busily engaged in dodging American locomotives that run along American rails."

"Hear, hear!" interrupted Curran.

"The railroad," continued Dugan, "was built by our British cousins, but in 1901 they found it necessary to call on American brains to complete some unfinished bridges.

"Just open the portals of that vacuous mind of yours and try to absorb these facts:

"A handful of American workmen, assisted by unskilled native labor, erected twenty-seven bridges in fifty-three weeks, and they did it at a cost lower than the competing British firm bid for placing the bridge material on board ship; and while you are assimilating this information, try and remember that the work was under the supervision of a twenty-four-year-old kid from Pennsylvania, named Leuder."

"Say," queried Curran, "are you chief statistician of the railroad world or just an ordinary bum fireman?"

"I'm a fireman by vocation and a student by avocation," replied Dugan. "Get a hunch on you, Curran, and take an interest in vital statistics. Get the study habit, and it won't be long before you are promoted from your post of suffix speed-suppressor."

"Say, you encyclopedic coal-tosser," replied Curran, "I don't see you graduating from the ranks of the industrial army on the strength of your learning. You ain't no blooming captain of industry."

"No," replied Dugan, "and I'm not dead yet. Did you ever hear of Dirk Johnson?"

"And who might he have been?" asked Curran. "Another one of those makers of history you're dippy on?"

"No," replied Dugan. "He was just an humble bridge-worker. Perhaps he went to Africa with that record-breaking outfit, and perhaps he didn't. Looking at those fellows rushing that bridge reminds me of him and of a howling mix-up of which he formed one of the component parts.

"Some years ago I made his acquaintance in New York City, whither he had drifted with a roll the size of an auto-tire. When he got through showing the natives 'how,' he had to look around for work. There was nothing doing in his line, so he connected with a job in a retail safe store.

"His duties consisted of assisting in the delivery of those little toy security-boxes that weigh about as much as an ordinary box-car.

"Delivering such goods to the inhabitants of metropolitan sky-scrappers is about as exciting as were the duties of the palaeozoic expressman in the time of the cliff-dwellers.

"Well, one day, they loaded up one of those Harveized cash-boxes, in which the average New York business man stores his reputation over night, and started to deliver the goods. They stopped in front of one of those tall temples of Mammon, and soon had their hoisting apparatus in position.

"When everything was in readiness to start the burglar-proof security sideboard on its upward journey, the foreman of the gang instructed Dirk to go on top of the safe and keep things in order on the way up. That was just in Dirk's line, and he considered the assignment in the light of a sinecure.

"The massive money-box ascended slowly, and Dirk had lots of leisure to observe the customs and habits of sky-scraperdom through the windows of the building.

"As the safe rose to the level of the fourth-floor window, Dirk glanced at the gold-let-tering on the pane. It read:

**CATCHEM & JAILEM,
Detective Agency.**

"Inside, he noted two men engaged in earnest conversation. As the safe rose higher, Dirk noticed that the upper sash was pulled down for ventilation, and as his head came opposite the opening he heard one of the men say:

"I tell you, Bill, Vandyke Red is in New York. I'm on to his methods, and I know

that this is the burg he'd make for, after pulling off a successful job like he did at the Seventh National at St. Louis. If we can only land him, it will mean a large reward."

"The reply was lost to Dirk, for the safe had carried him above the open window.

"Dirk recalled the hold-up the men were discussing. He had read, a few days previous, how a lone robber, with a red Vandyke and a brace of blued steel barkers, had held up the paying-teller of a bank in St. Louis and gotten away scot-free with his booty.

"'Gee!' he soliloquized, 'if I could only land that pink-whiskered Piute, I'd resign my job on the high and heavy section.'

"The next two floors were passed without incident, but when Dirk's eyes rose above the level of the window on the seventh floor he was astonished to see a large room fitted up like a bank. He wondered why a bank should be located on the seventh floor of a sky-scraper, but concluded it was for the convenience of the occupants of the building. Facing him, at the far end of the room, were the paying and receiving tellers' windows, at which several people were transacting business.

"The place presented the activity of such institutions, and Dirk cogitated on the time when he used to deposit his savings in his home-town saving fund, and he wished he was in position to cash a check for a couple of hundred. Then it would be *adios* to the giddy 'Garden of Allah' and back to the home of smoke and stogies.

"There was a lull in the activity of the bank, then Dirk nearly fell off the safe as a man entered with red Vandyke face-trimmings and an alligator grip. He made his way directly to the paying-teller's window and deposited the grip on the ledge, after handing the teller a check.

"That fellow certainly looks some like that fellow those fly-cops were discussing,' cogitated Dirk.

"The safe had stopped on a level with the open window, and Dirk was suddenly astounded to see the man draw a pair of revolvers from the grip and point them at the man behind the glass partition. He saw the paying-teller throw up his hands, and then, at a command from the robber, reach for the grip and commence stuffing it with packages of bank-notes.

"This is where I get off,' chuckled Dirk. 'Vandyke Red's my meat.'

"A few swift strides brought him directly behind the man with the guns. Dirk went

into executive session without waiting for roll-call, and soaked the hold-up artist one in the vertebrae. Then, throwing his arms around him, he swung him around facing the front windows so his shots could do no damage. The robber struggled to free himself, but Dirk held on tightly.

"Suddenly he heard the pistols clatter on the floor, and then he felt a strong arm secure a fancy wrestling-grip, and then he found himself sailing through the air over the other's head. He landed in a sitting posture with sufficient force to loosen his teeth and knock the breath out of him.

"Before he had time to recover his wits or his breath, his antagonist had grabbed him under the arms and was propelling him, feet foremost, over the highly polished floor toward the door. Suddenly, he was raised to his feet and was conscious of a violent rear-end collision which threw him into the corridor.

"Well, that fellow's a hot sock, all right," mused Dirk, addressing the door which had been slammed after him. "I guess I butted into the wrong combination, but he won't get away with the goods if I can help it."

"He ran swiftly to the elevator and entered the car.

"Let me off at the fourth floor, quick," he told the operator.

"Aw, get wise," retorted the boy. "This car's going up."

"See here, son," said Dirk, taking him gently by the back of the neck and swinging him to one side, "this car is going down."

"He seized the wheel and started the car downward. At the fourth floor he stopped.

"Now, you young Indian," he commanded, "chase that car down to the first floor and tell somebody in authority to let no one out of the building. There's a desperate robber up on the seventh floor, and he's got to be captured."

"All right, Old Cap Collier," answered the youth; "me for a share in the glory. Elevator Henry, the hero of the hour. I'm off."

"Dirk scudded down the corridor until he came to a door bearing the sign of Catchem & Jailem. Pushing the door open he rushed in.

"Say," he shouted, "do you want to catch Vandyke Red?"

"Catchem & Jailem sprang to their feet as one man.

"Where is he?" they sang in an anxious duet.

"Up-stairs," replied Dirk. "I just had

a go with him. Come on, I'll show you the way."

"Into the hall they raced, Dirk leading by a neck.

"What floor is he on?" called Catchem.

"Seventh," chirped Dirk.

"Take the stairs," commanded Jailem. "We'll lose time if we wait for the elevator."

"All right," assented Dirk. "You take the lead. I don't know where they are."

"Along the hall the trio sped. They reached the stairs and commenced the race upward. At the fifth floor Dirk was puffing. By the time they reached the sixth Dirk was panting, and when they reached the seventh Dirk's pants were short.

"This way," called Dirk, pounding along like a slow freight. The sleuths followed, and Dirk, who was getting his second wind, suddenly turned into another corridor. He noted the elevator-shaft some distance ahead, with the bank-entrance facing it. As a descending car stopped, he saw the man with the red Vandyke hurry from the bank and board the car. The door clanged shut, and when they reached the shaft the car was going down rapidly.

"While they were standing there, undecided as to the next move, a car stopped at the adjoining shaft, and the operator called, 'Down!'

"They made a rush for it and got aboard. Dirk recognized the operator as the one he had impressed into service a few minutes before. "Is the entrance guarded?" he asked.

"Yes, cap," replied the youth. "You can depend upon Elevator Henry to do your bidding. It's not every kid can corrolobate with the king of detectives."

"Catchem & Jailem looked on in amazement. This was a new one to them.

"First floor," shouted the operator. "Elevator Henry'll be in at the death."

"Dirk and the two sleuths stepped from the car. The man with the red Vandyke was in earnest conversation with two men who barred his passage. Catchem pressed forward, and, standing in front of the man, eyed him critically.

"It's all up, Red," he said. "Don't make any attempt at a getaway as I have you covered with my gun in my coat-pocket. Take him along, boys," he said, as Dirk and Jailem seized the prisoner on either side.

"Where to?" asked Dirk.

"Back to the bank," replied Catchem.

"Back to the elevator they led their captive, and Elevator Henry carried them up to the seventh floor in express time.

As they entered the bank, the paying-teller glanced up and looked at the quartet in amazement.

Then he hurried forward:

"What is the meaning of this, Van?" he asked, addressing the prisoner.

"Harry," said the prisoner, "allow me to present my friends to you. This," indicating Dirk, "is the gentleman who took the lesson in wrestling a few minutes ago. These two gentlemen," indicating Catchem & Jaillem, "are real live detectives."

"Say," questioned Dirk, addressing the receiving-teller, "didn't this fellow hold you up a little while ago?"

"I believe he did," replied the paying-teller, "but it was with a brace of his patent pistol-pattern cologne atomizers."

"And there was no robbery?" asked Jaillem.

"No," replied the paying-teller. "Van was simply cashing a check."

"Well, sir," said Jaillem, "I hope you will

excuse us. This 'amateur broke in on our privacy and told us Vandyke Red was up here. The laugh is on us. Good-day.'

"Say, pardner," said Dirk, addressing the Vandyke individual, "you don't happen to have a ticket to Pittsburgh in your clothes? I'm beginning to think New York is too strenuous for an humble bridge-worker."

"Well," replied that individual; "as the laugh is on you, I don't see any objection to staking you back to your native heath. The temptations of a great city are too much for a man of your heroic mold."

Dirk got the ticket, all right, and took the next train home. I haven't seen him since."

"I suppose," said Curran, "that is another of that 'Makers of History' series of yours. What is the lesson I'm to learn from it?"

"The moral," said Dugan, "is, 'Don't jump into a seventh-story window to catch a highwayman. Stick to terry-firma.'"

THE SMALLEST ENGINE IN THE WORLD.

From the Philadelphia Times, 1876.

AN incident happened in machinery hall yesterday afternoon which is well worth recording, as it exhibits the unparalleled advancement of American genius in small as well as in great things.

While a large throng of visitors from all countries were standing silently around the mighty Corliss engine, watching its gigantic movements with feelings partly of delight and partly of awe, a tall, gentlemanly looking personage, who afterward gave his name and address as Levi Taylor, of Indianola, Iowa, joined the crowd, and with the others paid unspoken yet eloquent homage to the wondrous monster before him.

After watching the motions for a few moments the gentleman passed around to one side, and, extracting from his pocket a small tin case, took from it what looked like a diminutive alcohol lamp, and, striking a match, started a miniature flame and placed the contrivance on a corner of the platform which surrounds the mighty steam giant from Rhode Island.

At first glance nothing could be discerned over this lamp but a small excrescence, which looked

more like a very juvenile humming-bird than anything else, but a close inspection showed that what was mistaken for liliputian wings was the fly-wheel of a perfect steam-engine, and persons with extra good eyes could, after a close examination, discover some of the other parts of the curious piece of mechanism.

This engine has for its foundation a twenty-five-cent gold-piece, and many of its parts are so tiny that they cannot be seen without a magnifying-glass. It has the regular steam-gage, and, though complete in every particular, the entire apparatus weighs only seven grains, while the engine proper weighs but three grains.

It is made of gold, steel, and platinum. The fly-wheel is only three-fourths of an inch in diameter, the stroke is one-twenty-fourth of an inch, and the cut-off one-sixty-fourth of an inch.

The machinery, which can all be taken apart, was packed in films of silk. It is to be hoped that this wonderful piece of work is to be placed on exhibition alongside of its grand antithesis, but it is now probably too late to make an entry.

A RECORD IN TRACK LAYING.

WITHOUT delaying the schedule and in just 21 minutes and 2 seconds, 3,720 feet of 56-pound rails, weighing 69,440 pounds, were replaced by 86,800 pounds of 70-pound rails. This was on the Lake Shore and Northern Railroad, in Syracuse, New York, near the Syracuse railroad junction bridge, where the interurban also uses the

tracks. The rails to be put in place were bonded together and placed beside the rails to be removed.


The crew began work at 9:13:10 A.M., and finished at 9:34:12 A.M., during which time 78 tons of steel rails were handled and a remarkable record established in track laying.—*Popular Electricity.*

Daughters of the Rail.

BY SALINA MAGOON.

THE Ladies' Society of the Brotherhood of Locomotive Firemen and Engineers now comprises 288 lodges, scattered throughout the United States and Canada. It is a flourishing order, too, and it adds greatly to the gaiety of the many social functions of the Brotherhood. However, these daughters of the rail are not mere social butterflies waiting only for the summer picnics and the winter dances. They are—first of all—the wives, mothers, and sweethearts of our boys. They are as well versed in railroad technique as any man; they are readers of this magazine, as we know, and there isn't one who can't tell the difference between a Gooch valve gear and Janney coupler in a jiffy.

Knowlton and the Cow—When the Brotherhood Ladies Went Broke—Dora Jasper's Ride to Save the Limited—Such a Sacrifice as Only a Railroader Can Make!

 **E**NGINEER JACK KNOWLTON, of the Vandalia lines, left his house in Decatur, Illinois, in company with his wife and elder daughter, and started to the home of Sister Cowles, the president of the local Ladies' Auxiliary of the Engineers' Brotherhood.

At the Cowles home the engineer and his family joined a party given in honor of the birthday of Sister Cowles's little daughter. This party was given merely as an excuse for getting Engineer Knowlton away from his home for an hour or two.

Hardly had the Knowltons walked out of sight of their house than men and women rose as if out of the earth all round the house, entered it by the front, the rear, and the side doors, and at once proceeded to turn that home topsy-turvy.

Were they looting the place? Hardly. They were bringing things in, not taking things out. The invaders numbered exactly fifty—twenty-five being sisters of the auxiliary and twenty-five being brothers of the Decatur division of the brotherhood.

Thus there was one sister and one brother for each year of the married life of Engineer

Jack Knowlton; and those who had thus taken possession of the house were working like bees to show that they remembered that the date was the twenty-fifth anniversary of the wedding of the Knowltons.

Every one of those sisters and brothers, when they stole into the engineer's home that evening, carried something emblematic of or contributing to the celebration of a silver wedding.

Ready for the Fray.

The mistress of ceremonies was Sister Cowles, president, as already stated, of the local ladies' lodge. She had planned the whole thing; but, as it fell to her lot also to get the Knowltons, out of their house during the early part of the evening by inviting them to a children's birthday party at her own house, she had to leave the actual work of turning the house upside down to be supervised by an able-bodied representative in the person of Brother Law, road-foreman of engines of the Vandalia lines.

Mr. Law issued orders right and left, like a general directing a battle.

"Put the strands of smilax here," he or-

dered. "Distribute the ferns there, and spraddle those flowers all over the place wherever you like."

Then the road-foreman of engines showed the sisters and brothers where to hang the silver bells, choosing the largest bell of all to hang over the table in the dining-room, on which table stood a mammoth wedding-cake. Streamers of silver ribbons were criss-crossed from side to side of the dining-room, with a wedding present at the end of each ribbon.

At nine o'clock Engineer Jack Knowlton and Sister Knowlton, and their daughter, mounted the porch and let themselves into their domicile. The place was dark and still, just as a home should be at nine o'clock at night in Decatur, Illinois. But the moment the Knowltons closed the front door electricity illumined every room in the house, from kitchen to guest-chamber.

A Complete Surprise.

In their parlor, Brother and Sister Knowlton beheld half a hundred friends sitting at tables, playing cards. Everywhere were silver-ribbon streamers, and silver bells, while in one corner stood a table filled with silver articles that looked mighty like wedding presents.

The special official present from the sisters, as a lodge, was a silver candelabra of great beauty. When Sister Spence, in a felicitous speech, presented Jack Knowlton personally with the candelabra, Jack tried his best to answer.

He began speaking, then choked back something that got in his throat; then began again, stopped short again, and then—he beat it for dear life out of the house to the back porch, where he spent some time making astronomical observations.

While Jack Knowlton was star-gazing, Brother Law, road-foreman of engines, standing in the doorway of the dining-room, spoke up so all the guests could hear him:

"It takes a whole lot to down Jack Knowlton—and this whole lot has done it. He's sure downed."

The Bryan of the Rails.

Jack Knowlton, however, presently returned to the banquet-hall with determination written on his countenance. Manifestly, he had resolved to make a speech, thanking the donors for the candelabra.

Taking his place at the table, and with his

eyes roving from the candelabra to the big wedding-cake, he began as he had begun before:

"My friends, I—"

Silence reigned intense, for all the guests now felt sure that Jack was going to orate with a vehemence of steam escaping from an engine.

To Jack, however, that silence was terrible.

"My friends, I—" he began again, then stopped short with his eyes fixed upon the wedding-cake, till suddenly he cried:

"My friends, I—well, where's the cow?"

His question, so unexpectedly asked, was greeted by tremendous laughter and applause, which lasted so long that Jack sat down, letting it be known that he had finished his speech, having said all there was to say, namely, "Where's the cow?"

Thereon hangs a tale.

One night, some months previous to the silver wedding, Engineer Knowlton's wife went down-town to attend a regular meeting of her order. She left behind her the following: First, a husband fast asleep after an extra run; second, a daughter wide-awake in anticipation of the coming of a nice young engineer who always called on Wednesday evening; third, a cow in the back yard.

Saw the Cow Jump.

Presently the wide-awake daughter saw the cow jump the front fence and run down the road. Out of the house the daughter tore, bent upon capturing that bovine and bringing it home.

To accomplish her purpose, she screamed at the top of her voice till the whole neighborhood responded, and a terrible hullabaloo ensued, during which that nice young engineer turned the corner and, supposing that at least one whole block of houses was in flames, promptly turned in an alarm.

Through that neighborhood, with clang of bells and thunder of hoofs and shriek of whistles, swooped the fire department. The fireman, having nothing else to do, proceeded to capture the cow and return her to Jack Knowlton's front yard.

Just then, Jack Knowlton, awakened from profound slumber by the racket outside, thrust his head out of the window and inquired of the fire department:

"What's all the fuss about?"

"Your cow, Mr. Knowlton. Some one forgot to do the milking to-night, and she sneaked out and told the whole population

of Decatur all about it, that's all. You better come down right now with your milk-maid's stool, Mr. Knowlton, and show that cow how sorry you are that folks neglected her."

"Where's your mother?" thundered Knowlton, addressing his daughter.

"She's at the lodge, father."

"She is, is she? Well, confound it! I'll get that lodge to excuse her from attending meetings till further notice."

At the Meeting.

When the sisters' lodge again found themselves "in congress assembled," up rose the secretary and read a letter from Brother John Knowlton, in which he asserted that the peace of his domicile had been greatly disturbed by the absence of his wife at the lodge, and asked that she be excused from further attendance at the meetings, especially meetings held at night.

"All in favor of excusing Sister Knowlton as requested say 'Aye!'" cried the president of the lodge, Sister Cowles. "Contrary, 'No!'" There being no 'Ayes,' and all 'Noes,' Sister Knowlton is not excused, and the secretary is directed to answer Brother Knowlton's communication accordingly."

"We'll fix him," said Sister Cowles, after the meeting had adjourned. "Next Monday is his birthday. We'll fix him."

The following Monday evening Jack Knowlton and a number of other brothers were invited to come to the lodge and meet the sisters, to pass a few social hours.

When all were assembled, Knowlton was lured to a place in the middle of the room. A door leading into the kitchen was opened, and out walked four sisters, bearing a huge birthday-cake, set around with nearly fifty lighted candles.

They set the cake on the table by Jack Knowlton, and then, suddenly, one of the sisters produced a toy cow, nearly as big as a small calf, stood it on the frosted cake, and cried:

"It's milking-time, Mr. Knowlton!"

"Wake up!" cried the president, Sister Cowles. "The cow's jumped the fence."

"Fire!" called another sister. "The fire department's coming, and you better jump for your life."

"Where's my wife?" shouted still another sister.

"At the lodge!" answered a number of sisters in chorus.

"Then expel her, and let her stay home

and milk the cow and maintain peace in my house while I sleep!" cried the secretary.

These remarks were hurled at Jack Knowlton amid the most hilarious doings on the part of the auxiliary sisters—with moo-ing in imitation of the voice of the cud-chewing kine, mingled with cries of "Scotland's burning! Fire! Fire!" and "It's your birthday, Jack Knowlton! Don't look so glum!" till finally the poor, defeated engineer cried: "Stung!"

"Then he turned to his wife to say: "Attend all the lodge meetings you like, little girl; I won't say another word."

That's why, on the night of his silver wedding, when he tried to make a speech, Jack Knowlton stared at the big wedding-cake and cried reminiscently, "Where's the cow?"

Going Broke.

"Let me tell you how all the railroad girls of Hannibal, Missouri, went broke through laying wagers on the wrong fat man in a Marathon race."

So said an old engineer and Brotherhood man, while he and I were crossing the Mississippi River on the ferry-boat running between East St. Louis and real St. Louis.

"The race was run up here at Canton, Missouri," the veteran railroader continued, "where the Mark Twain Division of the Brotherhood of Locomotive Engineers of Hannibal was holding a picnic.

"The boys were treating themselves to a day's outing, having chartered the steam packet W. W. to carry them the thirty-five miles up the Mississippi River from Hannibal to Canton.

"With the boys, of course, were their wives and sisters and sweethearts and a mother or two—these ladies, you understand, being mostly members of the auxiliary, or what you might call the female annex of the local lodge of the B. L. E.

"In general charge of the day's ceremonies was an engineer named Tankard. Well, sir, what does Tankard do, when they reach the picnic-grounds, but whisper a word in the ear of several of the sisters, who immediately show that they catch on by opening up on all and sundry with a proposition for a bit of fun.

"We suggest," one of the ladies said, speaking for all the sisters, "that the fat men of the party run a Marathon race."

"Good thing!" shouted all the living skeletons in the crowd. "Here, you, Brother

Dowd! and you, Brother Houser! the ladies want to know which of you can run the fastest.'

Two of the Heaviest.

"Dowd and Houser were two of the heaviest engineers in the bunch. There were other fat men, of course, but Dowd and Houser were the limit.

"Well, Dowd and Houser consented to enter the race along with the lesser obese ones. They shouted:

"What's the matter with letting Conductor Dooley into this Marathon?"

"The conductor referred to was an O. R. C. man, and a bully good fellow. He weighs about as much as President Taft, however, and was many pounds heavier than any engineer on the premises.

"Everybody laughed, especially the ladies, at the idea of Conductor Dooley running a Marathon, but Dooley didn't seem to mind any of the remarks derisive or miscellaneous.

"What he did was just to keep mum till the ladies had urged him good and hard to enter the race and then, seemingly with reluctance, he allowed he'd take a try at the running.

"Alongside of the fat conductor the two fattest engineers looked positively emaciated, the consequence being that every blamed bet made in that camp, by both brothers and sisters, was placed on one or the other of the engineers.

"At the same time, conductor Dooley went quietly through the crowd laying bets with each and every gent who would listen to him, betting every cent he possessed on his own fleet-footedness.

"They're Off!"

"When all was ready, Engineer Tankard gave the word.

"Away the fatties started on a run. Did the fat conductor make any showing at all? Well, say! alongside of the engineers he looked like a catamaran alongside a lot of canoes—but, all the same, he pulled ahead of the engineers from the very start, left them way behind and finished the Marathon in a walk.

"You never heard such howling in all your life. Every man and woman present had lost money, all having bet, as I have said, on the engineers.

"Conductor Dooley boarded the steam packet, for the return trip to Hannibal, with about all the money there was in that crowd.

"On the way down the Mississippi, Dooley mounted a bench and addressed those who had gone dead broke on the fat man's race, saying:

"Ladies and gentlemen: Never judge a fat man's running-gear by his weight. I happen to be the champion runner of the Fat Men's Club of the O. R. C. The trouble with you-all is that you didn't know what I've just told you. Therefore, friends, I've got the money and you-all are broke.

"Now, I see some of you are looking sore, some of the ladies in particular. But next time you make bets on a fat man's race, ladies, you lay your dough on the fattest man in the running and you will win money instead of losing it."

"But, Mr. Dooley," called out one of the auxiliaries, 'you haven't hit the nail on the head. We're not hurt at losing our money. What makes us feel so bad is that a lot of able-bodied engineers should be beaten so ignominiously by a conductor.'"

Dave Jasper's Run.

Engineer David Jasper had been running the Fast Mail on the Missouri and North Arkansas Railroad for years and had never met with an accident. Proud of his good luck, he often spoke of it.

"Knock on wood, Dave," cautioned a fellow-engineman one morning after Jasper had referred to his splendid record.

Dave, to oblige his superstitious friend, knocked on the brier bowl of his pipe, after which he climbed into his engine to take the Fast Mail out of Joplin, Missouri, and down as far as Leslie, Arkansas, a run of one hundred and ninety miles.

At about the half-way point of his run Dave Jasper would pull through Eureka Springs, an Arkansas health resort, just over the Missouri line. At Eureka Springs were the general offices of the railroad company and just a little north of the resort lived—Miss Dora Jasper.

Yes, I am obliged right here to change the scene of action to Dora's territory, in order that the meeting of Dora Jasper and David Jasper may be understood.

Trouble in the Distance.

It was that same morning when Dave Jasper knocked wood and then pulled out of Joplin. Dora, a farmer's daughter, up early, and having finished her chores, went for a stroll along the right-of-way of the Missouri

and North Arkansas Railroad, near the tracks of which she lived.

A freight-train rumbled by and Dora watched it as it rolled over the long trestle a little way down the line.

Sparks were flying from the locomotive. Dora thought she saw smoke coming up from the trestle. In curiosity, she ran down the track and, arriving at the northern end of the trestle, she found not only smoke, but flames, too, shooting up from the wooden structure.

The trestle was on fire.

So swiftly did the timbers burn that Dora became appalled.

"The mail train will be here in less than half an hour," she murmured in alarm. "What shall I do?"

She thought a moment, then started on a run toward her father's barn. The only horse in the barn was a half-broken colt, all the other horses having been taken by her father and the hired men that morning to work in a distant field.

The only thing for Dora to do, was to use the half-broken colt. She untied him and vaulted to his back. Riding bareback, and with only a rope for a bridle, she kicked the horse in the ribs and made him dash out of the yard and down the railroad.

Then up the right-of-way she rushed onward. Thinking that if she rode about one mile up the track, it would be far enough from the burning trestle to warn the engineer of the fast mail and enable him to stop his train in time, she urged the horse on and on.

On a Runaway.

When she thought she had ridden something over a mile, she pulled on her rope bridle, trying to stop the colt. The animal, however, plunged forward at a terrible pace.

"He's running away," she said to herself, quite calmly.

She decided, however, that if only she could keep him on or near the right-of-way, all would be well. On the other hand, if the runaway swerved and dashed off over the adjacent hills, her attempt to warn the mail train would have been all in vain.

Trusting to luck, she clung to the colt's back, till she had covered a second mile, when she heard a locomotive whistle.

"That's the train coming now!" she told herself. "Oh, Dick! good Dick!" was her prayer to the horse. "Please don't leave the track!"

On and on the beast tore, till nearly the third mile was covered and she came within sight of the station at Gaskins—three miles from Eureka Springs.

The fast mail was now in sight! One moment more and the train would shoot past her! Would the engineer heed her warning!

What could she do to make sure that the man in the engine would pay attention when she waved her hand to him!

Her hand! That was all she had to wave! Most heroines who save trains possess red tablecloths or red sweaters or red petticoats. But Dora Jasper had only her hand for a signal.

Her Only Signal.

Up the track sped the colt, and down the track rushed the train. Dora raised one hand frantically, while with the other she clung to the mane of the horse.

The engineer saw her. He heeded, too, not because he thought she was trying to stop his train, but because he supposed she was waving for help, as it was obvious that her mount was running away.

Engineer David Jasper, for it was he, brought his train to a standstill, then began backing. He backed faster and faster, till finally he overtook the girl on the horse.

After shooting by her, he slowed down, then jumped from his engine, ran back, met the flying colt, seized the rope halter, and—stopped the runaway.

"Oh!" cried Dora. "I'm so glad!"

"There, little gal!" cried Dave Jasper. "You're all safe now. Good-by. I mustn't stop another minute."

"No, no! Come back!" screamed Dora.

"That's all right, little gal. You can thank me some time when I ain't in a hurry." The engineer hastened on toward his engine.

"No, no! Wait!" cried Dora. "The runaway was nothing at all! I didn't mind that! The trestle down near Eureka is burning!"

Her Best Reward.

"What's that?" yelled Dave Jasper, turning in his tracks to look back at the girl, as she jumped from the colt's back.

In two minutes Dora had explained the situation to the amazed engineer: Meantime, the passengers and crew had gathered round.

"What's your name, little gal?" asked the engineer.

"Dora Jasper."

"Jasper! Why, then, we're of the same family, Dora. I'm a Jasper, too. Shake!"

"Hats off to the Jasper family!" cried the railway mail clerk who had suggested passing the hat.

"But you should accept some sort of reward, little gal," insisted Dave. "Tell you what," he added. "I'll see that you're made an auxiliary lady, do you see? I'll get the ladies of our auxiliary at Eureka Springs to make you an honorary member."

Dora listened to this with open mouth and expressionless face. She was not overwhelmed by the "reward."

"Why, what's the matter, gal?" asked Dave. "Ain't it enough? You want something more?"

"Tell you what," replied Dora. "I'd like you to carry me back to Eureka on your engine, Mr. Jasper. Will you?"

"Hop up there!" promptly answered Dave.

Thus Dora Jasper got the greatest wish of her life—a ride on an engine. When the train arrived at the gorge, where early that morning the freight had crossed on a trestle, there was now no trestle at all. Only a blackened mass of smoking timbers.

As Dave Jasper walked back to the fast mail, which Dora Jasper's bareback ride had saved from a plunge into the gorge, he said thoughtfully:

"It's good I knocked on wood this morning."

Dora, walking by the engineer's side, now said:

"Mr. Jasper, what-all was that honorable thing I'm going to be made into by the engineer ladies at Eureka Springs?"

"An auxiliary."

"And what-all happens to me when I'm that, Mr. Jasper?"

"Why, girl, you'll be invited to parties, and the ladies will pass you the lemonade and cake and ice-cream. You'll be invited to picnics daytimes, and you can attend lodge meetings, and take part in the dance afterward, and none of these things will cost you a cent; being an *honorary* auxiliary lady, won't be assessed at all."

Two Railroad Men.

The story involves two firemen of Little Rock, Arkansas.

One of the men was "Long" Kowle, bachelor, with a hundred in the bank.

The other was Jerry Jenhower, husband

and father, with almost nothing at all saved up and stowed in an ancient oil-can away at the back of the shelf in the kitchen pantry.

One day both firemen were notified that the road was cutting down the force out of Little Rock, and that one or the other would have to go. Thus, neither of them was directly laid off; simply it was put up to them to decide which should be the one to quit.

"Long" Kowle, the bachelor with cash in bank, met a woman on his way home that evening, to whom he said pleasantly:

"Good evening."

She was the wife of Jerry Jenhower, Kowle's comrade.

"Long" looked at her sharply, and noted traces of tears in her face.

When he moved on, that tear-stained face was still right in front of "Long's" eyes. All night, the sad face of Jenhower's wife haunted "Long," and, when morning came, he made a resolution. He scribbled a note, hurried with it to the roundhouse, handed it to the foreman, then went straight over to Jenhower's house.

He found Jerry just sitting down to the breakfast which his wife had prepared. Their little daughter sat at the table, too, absorbed in a dish of oatmeal.

"How do, everybody," said "Long" Kowle cheerily.

"How do, Kowle," replied Jerry gravely. "Well, this is the day. Either you or I must go to-day, Long! Suppose we draw lots? I'll take two straws from that whisk-broom over there, one long and one short, and the one that draws the shortest must—"

"Hold up, Jerry!" interrupted "Long." "You're a few minutes late. I've already resigned. I reckon I'm in better shape to go job-hunting than you are, my boy, so you put on your sleeve-guards and go to it."

The two men shook hands in silence; and, in silence, "Long" Kowle left the house.

Jerry Jenhower, benedict and father, found that he couldn't finish his breakfast. Something in his throat gave him a choking sensation, and he seized his sleeve-guards and his cap and left the place.

Meantime, the wife, the member of the ladies' auxiliary of the firemen's brotherhood of Little Rock, stood in her doorway and looked down the street at her disappearing husband, with a smile on her lips and a singularly bright look in her eyes.

Then she looked up street at the retreating figure of "Long" Kowle, and said:

"Long," you're the best railroad man in Arkansas."

Getting Ben Kilpatrick.

BY CHAUNCEY THOMAS.

THE TRUE STORY SERIES. In the following story is related the dramatic capture of one of the most picturesque and daring characters that ever practised the grim pastime of train-robbery. Kilpatrick was one of the class of men who took desperate chances—and any man who suddenly finds himself in the possession of thousands of dollars' worth of new and unsigned national bank bills is taking the most desperate chance of all when he tries to pass them. The gang with which Kilpatrick worked was one of the most daring that ever operated in the West, and many a railroader will remember them.

TRUE STORY, NUMBER FIFTY.

An Innocent Pawnbroker Took One of the Unsigned Bank Bills in Payment for a Watch, Then an Eagle-Eyed Bank Clerk and the St. Louis Police Did the Rest.



ONE November night, something over ten years ago, a Great Northern passenger-train was held up by five or six men, and, among other plunder from the express safe, the robbers took thirty-two thousand dollars in unsigned bills of the Helena National Bank. By daylight next morning the sheriff, with a strong posse and a number of railroad and express detectives, were on the ground. Large rewards were at once posted, and the chase began.

The trail led south across the frozen prairie, but was lost near the State-line. Just who the robbers were was not known at first, but good work in locating all possible suspects centered suspicion almost to a certainty on what was then known as "Black Jack's" gang of frontier desperadoes, among whom was Black Jack himself, Harry Longbaugh,

Bill Carver, Ben Kilpatrick, and several others.

The Pinkertons, also, had the case, and sent out hundreds of circulars giving a description of the suspected men. Unfortunately, only one photograph could be obtained—that of Harry Longbaugh. The circulars read in large type:

"Dangerous! These men are desperate criminals. They go heavily armed at all times, and are crack shots. Take no chances with them, as they will shoot to kill."

The Teller Is Surprised.

One of these circulars was posted in police headquarters at St. Louis a year after the robbery.

The affair was almost forgotten when suddenly four of the unsigned bills appeared at

EDITOR'S NOTE: All the stories published in this TRUE STORY SERIES have been carefully verified by application to officers or employees of the roads or companies concerned who are in a position to be acquainted with the facts. Contributors should give us the names of responsible persons to whom we may apply for such verification, in order that fruitless inquiries may be avoided. This condition does not imply any lack of confidence in the veracity of our contributors, but is imposed merely to give greater weight and authenticity to the stories.

Series began in the October, 1906, Railroad Man's Magazine. Single copies, 10 cents.

the receiving-teller's cage of one of the St. Louis banks.

As the receiving-teller checked up the deposit-slip of a certain pawnbroker, he gave a low whistle. Hurriedly he left his cage and went to the cashier's office.

"Here are four of those Helena National bills, stolen from the Great Northern a year ago. They just came in," he told the cashier.

The cashier glanced at the bills. They were apparently colored by use and signed, all right; but a moment's investigation showed that the coloring was due to the bills being dipped in cold black tea, and that the names signed were not the same as the officials of the Helena National Bank. At once he called up the United States Marshal's office.

"Hallo! We have just taken in four of those Helena National unsigned bills—the ones stolen in the Great Northern hold-up!"

"Do you know who passed them?" interrupted the marshal.

"Yes. We got them from a certain pawnbroker. Just came in ten minutes ago."

"I'll be right over," answered the United States officer. In five minutes he had the bills. In another ten minutes, with several deputies, he stood in the pawnbroker's shop. "Where did you get these bills?" he asked the frightened pawnbroker.

"A large dark man, six foot tall, came in here about an hour ago and bought a lady's solid gold watch for one hundred dollars. He gave me five twenties for it, and those bills were four of them; I guess. I didn't look at them especially, because all money looks alike to me. Aren't they good?" he asked anxiously, as he realized that he stood to lose eighty dollars if the bills were bad.

Picking Up a Clue.

Rapid questioning soon convinced the officers that the pawnbroker was innocent. He was well known in St. Louis, and bore an excellent reputation. Then the hunt began for the "large dark man."

The St. Louis police were at once notified, and in another hour every available officer in St. Louis was "on duty till relieved." All were alive to catch the man who had bought the watch, and, possibly, the five thousand dollars reward for one of the gang that held up the Great Northern train.

The pawnbroker was shown the circulars, and picked out the picture of Harry Longbaugh as that of the man who had bought the watch.

"We'll have Mr. Longbaugh if he's in town yet," said Chief of Detectives Desmond—"Big Bill" Desmond, he was called—to the marshal.

"Now, you men scatter all over the tenderloin, and keep your eyes peeled. Don't take any chances of arresting him single-handed. No grand-stand business, remember. If you try it some of you will get killed, and we don't want him to get away. If you see anything of him, notify headquarters at once, and call as many men together as you can before taking him. Now, get busy!"

And they did!

Al Guion, one of the detectives, was standing on a street corner about nine o'clock when a carriage went by in which was one man. He could not see him very well, but from a glance he thought the man was large and dark. He followed the carriage on foot till it stopped a block up the street at a certain resort.

The man left the carriage and entered the place.

Chasing the Carriage.

Before Guion could get to the carriage the man came out of the resort and was driven rapidly another block to a corner saloon, which he and the driver entered. Guion followed them inside. Standing at the bar, playfully feeding the free lunch to a stray dog, stood Harry Longbaugh.

Guion was unarmed, so he left the place quietly and looked around to locate some of the other men. One was in sight a block down the street, but was not looking Guion's way, and Guion dared not make any suspicious motions or Longbaugh would get suspicious and make his escape; probably shooting as he went, if necessary. Just then Guion heard the bartender inside say:

"You'd better be careful how you flash that roll of twenties down here, friend. You are liable to be held up."

"They won't hold me up," Longbaugh laughed quietly, as he left the saloon for the carriage. He was driven to another resort, which he entered, leaving the driver outside.

Meanwhile, Guion had caught the eye of the other detective, and had sent him on a hurry call to gather in some of their colleagues. In a few minutes five officers stood on the sidewalk before the resort.

They looked at each other, for in another minute some of them would probably be dead. Then they entered the front door. In the hall they asked for the man who had just come in. Not wanting any trouble, the

proprietor tried to bluff the officers. He laughingly said:

"Oh, he's all right, gentlemen. I know him," he assured the officers.

Guion Was Game.

Guion stumbled against the door of a gambling-room and threw it open. He staggered half-across the room as if falling, then leaped into the air and landed with his knees in the pit of Harry Longbaugh's stomach.

Longbaugh was seated in a chair, and before he was aware, Guion dived into his breast-pocket, whipped out a hammerless revolver, and stuck it in Longbaugh's face.

"Don't move, or I'll kill you," he said quietly. In the next instant the other officers had Longbaugh handcuffed.

"G-r-r-r-r—" came in a hoarse guttural from Longbaugh's set teeth, while his eyes fairly glowed green. He did not attempt to move. From his hip-pocket the officers took another gun, a .45 single-action, that may be seen to-day in the historic collection of noted arms in St. Louis police headquarters.

Then the prisoner, like a chained grizzly, was led to the patrol-wagon, which had been summoned with more police. No one knew what minute others of the desperate gang might appear and begin to shoot, so no chances were taken.

A quick dash put the patrol-wagon and its load of jubilant officers, with their silent, dangerous prisoner, before the door of Chief Desmond's office in the Four Courts Building.

With a pair of nippers on each wrist, and with two officers behind holding drawn guns, the hold-up was escorted to the office. He was as gentle as a lamb now, but his eyes were like a hawk's. Large, gray, with great black pupils, they took in everything, from the doors to the windows, back to the men around him, then suddenly blazed as they glanced for a fleeting instant toward a corner of the room.

A Forgotten Gun.

That glance was so vivid that the officers turned instinctively. On a small table in the corner was a large revolver which some officer had carelessly laid down and forgotten. Three officers made a jump for the gun, while the others stepped between it and the prisoner.

"Well, Longbaugh, the game's up. Any one else here with you?" asked Desmond pleasantly. The prisoner did not reply. He

did not even look at his questioner. He appeared to be very disinterested.

"He'll get over that when he's had time to cool off and think it over," said Desmond. "Put him in 'the holdover,' and allow no one to see him or speak to him—not even any of the police, remember," the chief added. So they led him down-stairs and placed him in a dark cell.

Then began ten days of as hard a game of "sweating" the truth out of a prisoner as Desmond ever knew. At the end of that time the chief had learned nothing whatever. He did not even know if the man he had was Harry Longbaugh or one of the Kilpatrick brothers.

Among the articles found on the prisoner was a small note-book on one page of which was written certain letters that corresponded with the initials of various members of the gang. The note-book contained some figures, too, that seemed to be the amount of money each of the gang had received from the hold-up. A brass key that looked like a hotel key, was also found on the prisoner. Desmond took it in his hand and studied it for a moment.

Fitting the Key.

"Here, take this and see if you can find a lock in St. Louis to fit it. He hasn't that lady's gold watch on him, so there is probably a woman in the case somewhere, and we want her before she has a chance to get away. She doesn't know he is arrested yet, so she is still here and will probably stay all night; but when the papers come out in the morning, she'll know all about the arrest. Now get busy."

Two of the men began a tour of the hotels and rooming houses for the lock that that key fitted.

"He has less than three hundred dollars of the stolen money on him, and you'll probably find it with that key," said Desmond.

About ten o'clock next morning the day clerk of the Wandull hotel recalled something he had forgotten.

"Yes, come to think of it, there is a large dark man stopping here. Came two days ago. Acted rather queer, too, come to think of it. Kept to his room and had all his meals sent up to him. There is a friend of his, a woman, who also has a room here.

"Here she comes now," said the clerk, suddenly.

"I want to pay my bill. Call a carriage, please, immediately. I want to catch the ten-

twenty-five train, and have barely time. Please have my trunk brought down immediately," she said to the clerk, while the officers loafed within ear-shot.

"Shall we take her?" whispered one of them.

The Woman Who Knew.

"Don't like to without knowing more about her. She may be all right, and that wouldn't do. Desmond would find fault, I'm afraid. You watch her and I'll slip up to her room and try this key. If it fits she's our meat."

While the woman sat in the waiting-room for her trunk and carriage, one of the officers ran up to the third floor and tried the key in the lock. It fitted.

"Take her," he muttered to his mate as he reached the ground floor. "She's the one."

The officer touched her on the arm.

"Madam, I am sorry to trouble you, but duty forces me to put you under arrest!"

"Sir! How dare you! What do you mean?" she blazed, but her bluff did not work.

The officers then and there opened her hand valise. It contained several bundles of Helena National Bank bills, all unsigned.

"Come with us," they said. She broke down and cried, but would say nothing.

"Ah, sit down," beamed Desmond when the officers led her into the chief's private office.

The woman remained silent to all questions.

"Put her in the 'holdover,'" ordered Desmond, and he turned to examine the contents of the trunk and the handbags now being taken from the patrol wagon.

Recovering the Coin.

The trunk contained nothing out of the ordinary, but the handbag rolled out many of the long missing bills from the Great Northern robbery. After counting, it was discovered that only \$18,000 of the missing \$32,000 was accounted for. The balance of the plunder, some \$14,000, was with the rest of the gang, and, it is understood, has never been recovered, with the exception of a few stray bills that the gang managed to pass here and there.

It was a tiresome job to get Longbaugh and the woman to talk, and nothing came of it. All that was learned after ten days was this:

"Chief, if you'll let up on me I'll tell you who I am," said the man prisoner, worn out by a steady stream of questions—often for twenty-three hours a day—from one man, Desmond.

"All right. Who are you?" agreed Desmond, and he never broke his word, once it was given to a prisoner.

"I am Ben Kilpatrick!" That is all any one ever did get from either of them.

Ben Kilpatrick he was, and not Harry Longbaugh. After he was asleep on the hard bench in his narrow dismal cell, Desmond wiped his weary forehead and said:

"Ben Kilpatrick is the most remarkable prisoner arrested in St. Louis in the past eighteen years. He is a man of iron. I never saw such a man. He is too dangerous a man to be at large."

A Legal Problem.

Then came up a new problem. What were the prisoners to be charged with before the United States Court. It was openly said that a good lawyer could easily get both clear. There was practically no evidence to prove that Kilpatrick had helped to hold up the train. He could not be charged with passing counterfeit money, as the money had been made by the United States government, nor could it be legally proven that this money had come into Kilpatrick's possession otherwise than as the woman declared, through gambling.

Here was a pretty mess of fish. Every one knew to a dead certainty that Ben Kilpatrick was one of the Great Northern train robbers, but knowing a thing and legally proving it are two widely different things.

However, Kilpatrick had nothing except the stolen money, and at the very last moment his lawyers withdrew from the case because they could not get the fee they asked.

Kilpatrick was charged with enough crimes to send him up for life if convicted, so he pleaded guilty to one charge and was sentenced to eighteen years in the Federal prison.

The woman got five years. The rest of the gang were either killed off in the West or escaped to the Argentine Republic, where some of them are said to be to-day. Bill Carver, one of the gang, was shot; and "Black Jack," the leader of the gang, was hanged in New Mexico a few years later.

By an odd coincidence, Ben Kilpatrick and Harry Longbaugh looked enough alike to be twins.

BELLERIN' SAM'S SUNDAY SUIT.

BY W. H. WILCOX.

Fate Handed Bellows a Bunch of Trouble, Starting an Undress Parade and Breaking Up a Love Affair.



HE time was a broiling-hot mid-afternoon in early August. The place was the coolest in all the sun-baked, blistered town of East Hartford, namely, in the shadow cast by the old water-tank that reared a spidery-girded and riveted structure close by the river side of the Midland roundhouse.

The man was old Sam Bellows, better known among the other men on the division as Bellerin' Sam. Not because of any propensity on his part for vocal gymnastics of extraordinary magnitude, as the sobriquet would seem to imply, but because, as Windy Anderson, its originator, stated, "Sam Bellers, Bellerin' Sam—what better do yuh want, huh?"

So Bellerin' Sam he became, and Bellerin' Sam he remains, though the author of the misfitted nickname has long since vanished from the ken of the Midland; gone to pastures new, where the rails stretch their shining lengths over alkali prairies and cactus-studded deserts, and where the scarcity of men causes the master mechanics to welcome the "boomer" and railroad outcast with open arms, regardless of past records.

But to return to Sam and the shade of the water-tank.

"By gee, sir," he remarked, "I'm glad it's my day off. Running an engine, especially on a way-freight, a day like this, is the nearest approach to purgatory we're liable to butt up against before we make an acquaintance with the real article."

After voicing this opinion, Sam relapsed into a deep meditation that I took pains not to disturb for some time.

Sooner or later I knew that it would be productive of speech, providing always that no extraneous event occurred to mar the thread of his thoughts. In the meantime the cigars were good, the shade exceedingly grateful after the dust and heat of the town proper, and his reminiscences were decidedly worth



"ALONG COMES DOGGIE A GALLOPING
ON THREE LEGS—WITH HIS
MOUTH WIDE OPEN."

waiting for. This day, however, they seemed to take longer than usual to crystallize into speech, and I finally became impatient.

"Some say," I remarked by way of a starter, "that purgatory is cold instead of hot."

"Anyway, cold or hot, we get a good imitation here on this road," he retorted.

"Why, I shouldn't think the cold would bother you fellows in the cab any. You look," said I, surveying his huge figure, "as though you had fat enough to keep you warm through a Greenland winter without bothering with any clothes."

"I do, huh? Well, just you try running around a strange town with the thermometer at fifteen below, and nothin' on but your skin and a union suit and see how you like it."

"Tell me about it," I requested, passing over another two-for-a-quarter.

"It happened back in ninety-five," he began between puffs. "Fourteen years makes a lot of difference in a man, and I was a hot sport in them days. I'd been running about eight months then.

"That was when the compounds first made their appearance, and I had one for a regular engine. The 358 she was. She's the 244, and a simple engine now. They changed her over after Terry Bain's father had the mix-up with her in Milton sag.

"A cross-compound she was when I had her, and a dandy piece of machinery. As far as actual use goes now, she's a cross between a rubber boot and an ash-barrel, and can't run as fast as I can. Won't make steam enough to blow the whistle louder than the ones they have on these peanut machines, and you couldn't keep water in her with a nineteen-inch injector. But she was a regular ball of fire when I had her on the fast freight.

"We cut off three and four hours every day from the regular running-time; and, instead of arriving in Huntsville at 9.30 P.M., we kept getting in at five-thirty and six o'clock every day. Great engine she was, but she was the means of losing me a corkin' good run with her fast going.

"Yes, sir. That getting into Huntsville at six o'clock queered me proper. That and my being such a hot sport, and so keen after the women folks.

"When I first took the job they had an old simple mogul on there. She was heavy enough to make the time had she been in any kind of shape; but between a valve motion that caused her to limp like a man with a wooden leg and a knack she had of going along like a hop-toad, one minute on her springs and the next down hard on her

frames with a jolt that would fairly loosen your eye-teeth and put crooks in your backbone, she was a tough proposition, and I hollered for another hog every time I reached the roundhouse.

"But my kickin' didn't do me any good till I began to drop a minute here and there in the rough spots, owing to easing off on her so I could keep my insides in their proper place.

"Then they gave me the 358, and, man, how we used to burn up the rails getting over the road! It wasn't long before the despatcher got wise to what kind of an engine he was issuing orders for, and to help us out he'd run us extra from Branchville; and, instead of going to bed when I got in, I began to look for adventures.

"Well, it wasn't long before I became acquainted; and I took in the dances, one after another; and the occasional vaudeville shows that hit the town for one-night stands. I think it was the third dance that I went to that I became acquainted with the girl in the case.

"She was the one that helped the 358 out in losing me that fly run, but I don't want you to think that she was the only girl I became acquainted with—not by a jugful. You see, I was a red-hot sport in them days, and I had women tagging around after me like tabby-cats after a bit of salmon.

"But Rose-Audette was the one I cottoned to most, and I reckon if it hadn't been for my undress parade through the burg I'd been foolish enough to have married her.

"I even got so bad, I used to let the fireman take the hog to the roundhouse, and I'd drop off in the freight-yard and have a bath and change my clothes in the hack. Had it all fixed up with the flagman to have a roaring hot fire and a big pail of boiling water in the caboose every time we struck Huntsville. The train-crew all lived there, and I usually had the buggy all to myself.

"That particular night I had an engagement to take Marie to the show. I remember the name of it, all right. It was 'A Hot-Foot Through Huntsville,' and that was just what I did with a darn sight more realism than those actor folks could ever stack up.

"We were rather later than usual getting in, owing to a hot-box on the caboose that bothered us considerably; and, of course, as it was the hack, we couldn't set it out on a siding, but had to monkey around, putting in a new brass and packing it with dope till it ran cool enough to hit up a forty-mile clip again.

"I met the conductor coming along with a bundle under his arm, as I was on my way back to the rear end.

"Hey, Bingham," says I, 'where you goin' with my clothes?'

"Ain't your clothes," said he; 'it's some grub for to-morrow's dinner. Jack laid your clothes out on the locker.'

"All right," said I, 'but that bundle looks a whole lot like mine.' You see, I used to wrap my duds up in paper to insure their staying clean.

"Sure enough, when I entered the caboose there was my bundle of clothes reposin' nice and quiet on the locker. I didn't stop to open them, but peeled off my working clothes

"Gee, what a crash! She simply lifted that van up on one end, walloped the center-pins till they broke off, and finally let it down nice and gentle, after a week or so, crossways of the track.

"When I came out of my daze, there I sat, astraddle a signal oil-can, with the bath-tub turned over my head like a Manila hat and the bundle containing my Sunday suit between my knees. I moved around a little,



"GO IT, BILL!" HOLLERS ONE.
THE REST OF THE ADVICE I
COULDN'T HEAR."

in a hurry, leaving on nothin' but my union suit till I got the water ready, because it was rather chilly in that hack.

"I poured the pail of water into a small bath-tub I had purchased a couple of trips before, and was sitting on the edge of the locker, dabbling one toe into the water and yanking it out again, and swearing because there wasn't any more cold water in the plaguy hack to cool it off with, when a switch-engine suddenly got under that caboose like a ton of dynamite.

trying to get that bath-tub lifted off, and promptly let out a yell and jumped a foot or two ahead.

"One of my feet had come in contact with something decidedly hot.

"I commenced to smell smoke, and when at last I got out from under the tub I lost no time in seizing my bundle of clothes and crawling through the wreck of the doorway. You see, the stove had been ripped loose from its lashings and upset, and inside of two minutes that hack was a roaring furnace, so there was I with my bundle, a working shirt, and one shoe that I picked up on the platform, where they had fallen when the hack up-ended, turned loose in the gentle December breezes with the thermometer registering fifteen.

"That was the starter. The finish—well, the finish was sure a hot one."



"THE ENTIRE POLICE-FORCE, WITH THEIR GUNS DRAWN, COMMANDING ME TO COME OUT PEACEABLE."

Sam paused in his narrative to throw the butt of his cigar away and look at his watch.

"Have another smoke, Sam," said I, alive to the tentative suggestion conveyed by this proceeding, and also a graduate of numerous former experiences. To keep Bellows talking, one has got to supply the tobacco. As a general rule, the quality of his reminiscences depends upon the grade of the cigars, but the number of smokes given at a time should never exceed one, else will he immediately have a pressing engagement.

"Well," he resumed, when he had once more begun to puff contentedly on the weed, "did I ever tell you about how I was bitten by a dog when I was a kid, and how I've always been scared at the sight of one since?"

"No," said I, "but what has that got to do with your promenading through Huntsville in your union suit?"

"Why, simply this: Right alongside that track there was a switchman's shanty, and the switchman stationed there had the homeliest, bow-legged, cross-eyed mongrel I ever saw. Every one said he was harmless, but he certainly looked ugly enough, and I had just started to dress behind a box car—had the one shoe on, and one arm and my head through the shirt—when along comes doggie, a galloping on three legs—he lost the fourth one under a freight-car—with his mouth wide open, lookin' as red and hungry as a shipwrecked sailor.

"Did I wait to make his acquaintance? Not so's you'd notice it. I grabbed my bundle, and ran along between a string of cars, with that beauty dog a tagging a few yards in the rear. I was as thin as you are in them days, and I could

sprint along right lively; and, though I was handicapped some by reason of only having one shoe on and the other foot bare, the pup only had one hind leg to push him ahead with, so that it was a pretty evenly matched race.

"Up the yard we went; around the end of a box car, where I lost a good lead, owing to doggie's going underneath, where I had to go around, we sprinted. We would have had that end of the yard all to ourselves had I followed my first idea of trying to play hide-and-seek with that distorted animal, owing to the yard-crews all being down to the wrecked caboose; but he got so big after gaining those three or four feet that I cut across lots, through a back yard, and down the main street.

"I was mortally afraid I'd run into some woman every minute; but the dog at my heels fairly scared all sense out of me, and

sufficed to keep me going at the same lively clip.

"The first block I met no one. Down to the end of the second I spied a lonely female, plodding along, hanging her head, all unconscious of the shocking spectacle that was coming down on her like a runaway locomotive. I didn't want to meet her, so I dodged around a corner and down a side street.

"How was I to know the Belmont Hotel was on that branch, or that I'd butt into a bunch of actors and actresses comin' out? I did, though, and it startled me so I lost the shoe, which wasn't laced up, anyway. You could have heard them hollering and shrieking half-way to East Hartford when they took in the spectacle.

"Go it, Bill!" hollers one. The rest of the advice I couldn't hear.

"Go to blazes!" I hollers back. I did have wind enough for that, though I was getting pretty well winded, and that starched shirt was near cutting my head off, while the bundle weighed a ton.

"The next thing, there pops up a bevy of young fellows and girls. Mostly girls, I guess. They scattered right proper with a whole bunch of feminine giggles and squeals, taking to the front lawns like ducks to water.

"I was pretty tired by that time, and looking around everywhere for a friendly hole to dodge into. Of course, I wasn't embarrassed. Oh, no!

"Well, I was about ready to give up and let that hopping pup get a good feed of my shins, when I spied a small door slightly opened in the side of a big brick building on the corner. In my rattled condition I didn't notice that the building was a church, and if I had it wouldn't have made any difference. I made one mad leap and went through that door like a cyclone.

"I went through the door, all right; but if I'd struck a brick wall I couldn't have

stopped any quicker. Why? Because I landed plumb onto the platform in front of a whole gathering of women. Y. W. C. A. meeting, I guess.

"For a minute there was a horrified silence. I can see the leader now; a tall, angular woman, with spectacles, as she turned her shocked and outraged countenance in my direction.

"Then pandemonium broke loose, but I can't describe it. You see, I heard the fore-feet of that persistent cur strike the steps back of me, and I dropped my bundle and dove head first into a small cubby-hole under the organ, pulling the door to behind me.

"For a while I could hear a smothered commotion in the church proper. Then all was still. Pretty soon some one yanks the door open, and there stood the three constables comprising the entire police-force of the town, with their guns drawn, and each and every one of them commanding me to come out peaceable. They all had some sort of garment on their arm, enough cloth to cover an elephant.

"I came out, all right; but what got me— Sam shook his head and pulled meditatively on his cigar.

"Yes?" I interrogated. "What got you, Sam?"

"Why, that pesky dog lay over in a corner with his sides stuffed out ready to bu'st, and his head laying over nice and peaceable on the remains of a hunk of beef. You see, I'd been lugging Bingham's Sunday dinner around under the mistaken impression that it was my clothes, when they were really in the bundle he carried home with him."

"What happened next, Sam?"

"Aw, what's the use? I couldn't describe the rest of it if I had the dictionary on my tongue, any more than I had face enough to go back and see Rose after it was all settled up. Darn a dog and a compound, anyway!"





A BOOMER GIRL.

BY BESSIE BARDSLEY.

Written for "The Railroad Man's Magazine."

I'VE hashed on every railroad from Mex. up to B. C.;
The waitresses in swell hotels ain't got anything on me.
I travel o'er the country; I don't have to pay my fare;
If I take a notion to cross the ocean, I'll bet I get shipped
there.

It's pretty hard work, hashing on any railroad line;
The hours are long, but there's lots of fun when the bunch comes in
to dine.
When the tourists come they swarm the "ring" like bees around a
hive;
But it's worth the bustle, the hurry and hustle, just to know that
you're alive.

With seven sauce-dishes in one hand and orders stacked to your chin,
With hot plates burning your good left arm—it's sometimes hard to
grin;
But if you are game you can sling the hash and pass on a little jest.
"Arm work" is our way, we can't carry a tray—there's no class to
that out West.

I've fallen in love with cowboys—once I had an Indian beau;
I didn't leave any trail for him when I felt it was time to go.
And I used to be sweet on a hog-head—he's been hard to forget—
It was "Heart be still!" ev'ry time I saw Bill, but there's been no
tie-up yet.

Oh, I'm a regular railroad boomer! I'm running myself a race,
For my feet get awfully painful when I stay a month in one place.
The only thing that brings relief is to hike for a town that's new;
It's "Hello!" "Farewell!" If they don't like it—well, "My check,
if you please—I'm through!"



Told in the Smoker.

BY RICHARD MAXWELL WINANS.

More Rapid-Fire Yarns of Clever Maneuvers, Repartee, and Shrewd Road Generalship, That Won Big Orders and Much Merriment for the Ever-Jovial Knights of the Grip.

THE OFFICE-SEEKERS' SPECIAL.

IT was shortly after the inauguration of President Taft that Harry Lewis, who carries a line of stocks through the West, together with two other traveling-men and myself, were gathered in the smoking-compartment, late one night, on a sleeper bound for Washington, D. C.

Every berth in the car was taken to the last upper, and, as one of us remarked, it was strictly a stag-party affair, for there was not a woman in the car to break the monotony. The make-up of this particular car-load of human freight attracted my attention, for most of them looked to me like a line of samples all cut from the same piece of cloth.

After sizing them up pretty carefully and listening to a few bits of conversation, which, in the main, they seemed to be trying to divert to commonplace channels, I came to the conclusion that they belonged to a class of citizens much in evidence on Washington-bound trains at this season every four years.

After Langdon had finished what we had agreed was to be the last yarn for the night before retiring, I ventured my guess as to the specific classification of our fellow passengers.

Merkel, who carries hose—the kind with a hole in only one end—offered to bet me the breakfasts in the diner next morning for the four of us that I was on the wrong line, and he put it up to me to produce evidence to the contrary. I took him on, and agreed to make good on my conclusions before the porter should finish making up the berths in the morning.

It was late and, all being shy on sleep, we soon turned in; but I didn't yet quite see my way out on the bet, and so I lay awake for an hour or so thinking it over. Finally I connected with an idea. I got up and went over to Lewis's berth, which was just opposite mine, and posted him on the lines I wanted him to play.

I had the porter give me an early call, and was up before the others were awake. At the first stop I bought a morning paper. I then

came in and woke Lewis and the other two, and, in doing so, managed to create enough commotion to get the whole car awake.

For a few minutes I made enough noise rattling and crackling that paper to set every man's nerves on edge, and then, in a tone of surprised discovery, I called loudly across the aisle to my friends:

"Hey! I say, Lewis! Wake up! Here is the greatest piece of news ever, red-hot from the new administration!"

"What's that?" answered Lewis, following the cue I had given him.

"Why," said I, in a tone loud enough to reach either end of the car; "it's the report of an order that was issued yesterday by President Taft."

"What's the gist of it?" asked Lewis in a high key of keen interest.

"Why," I continued, giving full voice to my reply, "it goes on to say here that President Taft has issued orders that all incoming office-seekers should be impartially rounded up at the railroad station as fast as they arrive in Washington, and sent home forthwith!"

Well, sir, the curtains on nearly every berth on that car were instantly yanked aside, when a tousled head appeared in the opening and an excited chorus of strident voices were shouting wildly at me just these two words:

"What's that?"

I had won the bet.

Those fellows had unwittingly proclaimed their mission to the capital; ambassadors extraordinary on public business relating exclusively to the private interests and benefits of the perpendicular-pronoun "I."

At Merkel's invitation—and expense—we filed into the diner. We let it be known, incidentally, that we were hungry to the limit, and the breakfast we ordered on Merkel would have made a veteran chopper in a logging camp envy our four-ply appetite.

We kept stoking away until we began to feel that the supply of fried chicken, waffles, and maple sirup must be about exhausted, and then, with that "peace-on-earth-good-will-to-men" sort of feeling that comes from a third cup of steaming coffee, we hit the trail back to the smoking-compartment.

THE RETURNED OVERALLS.

"**T**HAT breakfast," said Langdon, as he leaned back in his chair with a smile of happy recollection, "reminds me of a dinner on Ed Hanford, in Chicago, last sea-

son. Hanford carries a high-grade line of overalls out of Chicago. He'd been assigned a new territory in the Northwest, and just before starting out he received a letter from a would-be customer in a small town up in Minnesota.

"The letter was to say that the writer had been informed that Hanford was to cover that section, and that it was desired to place an order for three hundred pairs of overalls to be shipped at an early date, and asking Ed to make that town as soon as it was possibly convenient. The letter was signed C. M. Oldfield.

"Hanford was so elated by this advance order as a promise of a good run of sales in the new territory that he had a special pair of fancy overalls made that would have done credit to a Broadway tailor, and sent out as a good-will present to the prospective customer. Then he wrote a very chatty letter some yards long in which he made mention of some choice cigars and a little something wet he carried in his grip, and closed by referring to the overalls, of which he said: 'I pray you accept these as a personal matter and wear them with my compliments.'

"I was with him, a few days later, in his hotel when he was handed a telegram from the writer of the letter. His face turned red as he ran his eye over it, and he said something not very ladylike as he handed it to me to read. This is what it said:

"'Gift received and appreciated. Cannot wear them, however, until the styles change. (Signed) Caroline Margaret Oldfield.'

"But Ed wasn't a fellow to go down for the count for a jolt like that. He intimated that if Miss Caroline should measure up to his esthetic ideas as she did in a business way, why, he'd make her more to him than an overall customer. And he did. I received an invite about a week ago to attend the wedding. Ed was not the kind to let a good thing get by him."



THEY DIDN'T GET BY.

"**W**ELL, he didn't have much on a fellow I knew," chirped in Merkel, apparently pleased to know he was not the only mistaken-identity victim.

"His name was Harry Swift, too, at that. Carried a line of boys' clothing in the South. He was a wide-awake chap of the never-let-any-one-get-the-better-of-you class. He was on one of them little jerk-water roads, making a run from one main line over to another.

"The train stopped at a little wayside tank to take water, and the conductor failed to send back a flagman. Presently there came along the road's crack limited, running at the rate of seven or eight miles an hour, and bumped bang into the rear of the first train.

"Swift was riding in the smoker with his back to the engine, playing pitch with three others. He was lifted bodily from his seat and thrown clear across the back of the seat facing him. His hat was smashed down over his ears, and his meerschaum pipe cracked into bits. He scrambled back into his seat, a little bruised but not badly injured.

"Then he pried off his lid, straightened up, drew a long breath, looked around defiantly, and said: 'Hully gee! They made a big bluff at it; but they didn't get by us, anyhow!'"

GAVE HIM HIS MONEY'S WORTH.

"**T**HERE was Frank Haskell," put in Lewis. "He carries a line of patent belting, and his success is largely due to not letting anything get by him without showing cause.

"When he came fresh from college, where he'd played on the football team, his sole asset in the business world was nerve and sticktoitiveness; for he'd never earned a red copper in his life.

"When he started after a job he went to old man Brigham, the general manager of the company, and nonchalantly told him he would like to have the exclusive right to a certain very choice piece of territory. Old Brigham gasped, caught his breath, and gave Haskell what he asked for almost before he'd looked him over, taken clear off his feet by the very boldness of the proposition.

"After Brigham had given him his final instructions next day, he shook hands in a perfunctory sort of way and smiled sarcastically as he went out, as much as to say: 'You'll make good; I don't think!'

"But he did, and here is one illustration of how he did it: He located one of the first prospective customers he'd 'lined up' for a sale, in his exclusive and palatial private office one morning. He gave his card to the office-boy, and buried himself in a big leather chair to await the lad's return. From where he sat, he could see the manager through the plain beveled edge of the ground-glass partition, and he saw him give the card a casual glance, tear it in bits, and drop it in the waste-basket.

"That got on Haskell's nerves, and so, when the office-boy came back with the old story that the manager was very sorry, but could not see Mr. Haskell that morning, he promptly sent the boy back with the request that the manager return the card to him which he had seen torn up.

"The youngster returned in a jiffy and handed Haskell a nickel, with the remark that the manager had mislaid the card, but that if it was so valuable perhaps the nickel would cover the damages.

"But Haskell wasn't done yet. Taking another card from his case, he scratched a line on it, slipped the boy a quarter, and had his card again laid on the manager's desk. Beside the name, he now read thereon these words:

"These cards are two for a nickel."

"Haskell got that interview, and he sold that man enough belting to last him two seasons. There isn't any least flicker of sarcasm in old Brigham's smile now when he meets Haskell."

IT BROUGHT RESULTS.

"**T**HE parting injunction that I received from my boss when I started out on my first trip," said Langdon, as he dropped the sugar into his second cup of coffee, "was: 'Work hard and keep your nerve.'"

"My first point was Cleveland, where I landed bright and early next day. I pounded the streets that day until the lamps were lit, and succeeded in getting just one order on my book as the result of that long day's work. Toward the close of the second day I hadn't added anything to it, and the next firm on the list was one of the largest in the city.

"When I reached the reception-room there was no one in sight, and I stood around on one foot and then the other like a chicken on ice. I dreaded that interview. Nearly every traveling man was afraid of those people. Finally an office door opened and a man about six feet three walked over and took my card. After which he seemed to try to look a hole through me.

"I should like to see Mr. Blank, or his manager, if he is not in," I said in a businesslike tone.

"They are too busy to see you," said this near-giant, turning on his heel toward the door from which he had come.

"How about his chief clerk? Is he busy, too?" I asked as a desperate chance.

"Yes!" he jerked out in a voice that

would freeze you. 'They are all too busy to see you. We don't want anything.'

"Sir," said I, in a tone that equaled his own in severity, 'I don't know who you may be, or what position you may hold in this company; but I believe, sir, that, if Mr. Blank realized he had a man of your caliber in his employ, he would discharge you, for I believe him to be too good a business man not to listen to any business proposition which might present itself.'

"I looked him square in the eye as I finished, and saw a faint smile hovering around the corners of his mouth as he answered: 'Come in. I am Mr. Blank.'

"Right there I sold him a bill of goods that amounted to more than I had expected my whole trip to net me. I kept right on selling him as long as I was in his line, and many a time Blank and I laughed over the calling-down I gave him that evening."



THIS DOG CLIMBED A TREE.

"WELL," said Merkel, beckoning to the waiter for another cup of cocoa, "I think I had some rougher knocks than you on my first trip, and nothing quite so soft to bump against, either. I had been sent into the Mississippi Valley, and I made my début there in one of the smaller cities, eleven hundred miles from home, a stranger among a strange people, out with a heavy sample-case, starting out to call on my first customer. My goods were new to me, I'd never sold a bill before, and I was conscious of being about as green as they make 'em.

"I called on every jobber in the town, and was turned down with such regularity the novelty of it had worn off by noon. Then I went back to my hotel to hold a council of war in committee of one. There I was, with not a soul I knew, a failure so far for a new house and 'frozen' in my first town. Worse than that, it was my first day.

"As I sat there in my room with gloom and dejection wrapped around me in a perfect fog, I suddenly recalled an old story that I remembered my mother was fond of telling me when I was a boy. It run about as follows:

"An old Southern ducky of antebellum days appeared before his master in a most wretched and dilapidated condition.

"'What's the matter, 'Rastus? Where have you been? What's happened to you?'" inquired his master.

"Oh, Mars Henry, I's done had a orful

time. I done took a shot at a big bear an' he jist kim right along aftah me, took my gun away, an' broke it up to nuffin'! Den I clumb a tree, an' de dog he done clumb a tree, an'—"

"'Why, you old liar!' broke in the master. 'Now, 'Rastus, you know no dog could climb a tree!'

"'Well, Mars Henry,' responded 'Rastus in all seriousness, 'you see, dis yere dog he done hab to climb a tree.'

"Right then and there I concluded that in my case it was up to the dog to climb the tree.

"After getting a bite to eat, I went back to the largest jobber I had called on in the morning and asked him what price he was accustomed to get from the retail trade for such goods as I carried. He told me, and then he wanted to know why I had asked. I replied that I was going out to sell some.

"'But they won't sell, I tell you,' was his snappy answer.

"During that afternoon I tramped those dusty streets, sweating, swearing, and making sales right and left. By evening I had gathered in a mighty good bunch of orders, and it was a decidedly different lad who again presented himself to that jobber.

"'Well,' said I cheerfully, 'I'll just fill those orders for you, young man.'

"'Oh, no; not much,' I replied with an air of independence, for you see the dog had 'climbed his tree,' and I was safe. 'If you want those orders,' I continued, 'you will have to multiply the amount of my sales by at least ten.'

"But when I closed with him next day it was for twenty times the amount of my sales. While I have never been in the same fix or the same place since, I have never forgotten that every dog can climb his tree when he has to."



WHEN LEWIS GAVE THE GRIP.

"THERE was a trip I made last season," said Lewis, biting the top off a big, black dollar cigar, "on which I sold some goods that I really hadn't expected to, and by a trick that wasn't altogether of my own turning, either.

"Just before starting out on the trip I tore the palm of my right hand on a nail that stuck out on the side of my sample-trunk. It didn't amount to more than a scratch, but it was in a very awkward place. I washed it thoroughly with an antiseptic,

and then thought no more about it until I reached St. Louis, my first stop. In that city it seemed to me that I had never before met so many friends of the handshaking variety. When I finally landed in my room at the hotel that scratch began to look like a full-sized saber-cut, and my whole hand was quite inflamed and sore.

"Of course, it was a mere trifle, but you know how sensitive a man can be over such little things. I didn't want to poke out my left paw to every one I met and explain that I had scratched my right hand on a pesky nail, so I kept right on handing out the sore mitt to every customer I met, wincing every time they squeezed it.

"During the course of the day I discovered that by holding my hand in a certain position I could protect the wound and at the same time give no opportunity for complaint because of a lack of warmth in my greeting. Shortly after I had made this discovery, I chanced to meet on the street a man by the name of Bascom, the buyer for one of the biggest houses in my line. He was the very man I wanted to corral, for none of our men had ever been able to land him for a decent order.

"When I met him we shook hands, and I curled up my palm to protect the scratch and at the same time give him a good, hearty shake. As I took his hand I noticed a peculiar look on Bascom's face, and he squeezed my hand with renewed vigor. To break the pressure without giving offense I made a sort of lever of my thumb, bearing down on the back of his hand to try to ease his grip.

"I was not a little surprised when Bascom began to talk good, hard business right there and then, and finished by asking me to come around with my samples that afternoon. You may be sure I was Johnny-on-the-spot with him, and he greeted me with a great show of cordiality. Within no time at all I had sold him a bill of goods that put in the shade all my other orders combined, with his signature snugly at the bottom of it all.

"Highly elated with my good day's work, I was about to leave, when Bascom put his hand on my shoulder and said in a low, confidential tone:

"Of course, brother, you know this is the night for the general election. Under the by-laws, you, as a traveling member, are entitled to a vote in any city you may happen to be in at the time. If you have not already made a choice, I would like to urge the fitness of Brother Smith for the office of the grand ex-

alted gazook.' I withhold the actual name of the office for fear it might get me into hot water.

"Smith is a most worthy man,' Bascom continued, 'and we purpose giving him the biggest vote from this city that was ever known in the history of the order. Now, as I said, if you have not already made your choice of a candidate, I shall consider it a very great personal favor if you will come to the lodge rooms to-night with your credentials and take part in the election.'

"Why, Bascom,' said I, with a puzzled expression, 'this is all Greek to me. I don't belong to any order, and know nothing about any election. Still, if there is anything I can do, why—'

"But,' he exclaimed with some heat, 'you are a member of the Knights of the Royal Gazooks!'

"On the other hand, I never even heard of them,' I replied cheerfully.

"Then how in thunder did you come to know the grip?' he demanded with rising temper. 'And you gave me the answering grip, too, when I tested you. By the eternal, there is a traitor somewhere!' and by this time he was almost shouting. 'See here,' he continued in the same high key, 'will you answer me this?' And then he gave a peculiar flourish with his left hand.

"I stood there like a fool, wondering if I had suddenly gone clean dippy; but with the best manner I could assume I said: 'Bascom, you've got me guessing; I don't connect at all.'

"Believe me, sir, there has been a mistake,' he said with frost in his voice. 'I trust that you are gentleman enough not to take advantage of anything you may have learned. Good day, sir!' And with that he turned on his heel without shaking hands, flounced into his office, and slammed the door after him.

"Not until I got back to my hotel did I form any connection between my scratched hand and Bascom's behavior. It seems that in twisting around to protect my sore hand I had unconsciously stumbled upon the grip of a secret order. However, it was the means of my selling a whopping big bill of goods to a man I had not counted on, and of getting a letter of special commendation from the house.

"Looking at it from his point of view, however, I don't think that I will ever be able to sell Bascom any more goods."

"I once sold a bill of goods," said Langdon reminiscently, "to an old codger down

in Missouri after I had given him up as a hopeless case. That was back in my salad days, and I was carrying a line of dress-goods.

HE SAW THE JOKE.

"WHEN I landed in the town and laid out my samples, the first customer I had on my list happened to be this old fellow. I didn't know then that he was noted for his dilly-dallying tactics with all drummers, or I would have let him go until last and made short work of him.

"He came in and began looking over my line. He handled them and rehandled them until they were all mussed up and topsyturvy, and still he hadn't made a noise like an order for a single yard.

"At first I did what I could to help him get a line on what he might buy to best advantage; and then I gave up and sat down to watch the performance, my patience getting closer and closer to the rough edge all the time. Finally he looked over toward me, and said:

"Young man, do you reckon that these here goods are fashionable?"

"Well," I replied, when I could recover my breath, "I do reckon they were when I first begun to show them to you; but I'll be hanged if I can tell you whether they are now or not."

"Well, sir, that pert reply tickled the old man so that he broke out into a hearty laugh; and the best of it was that he turned to and gave me a whaling big order, and he was a steady customer of mine as long as I was in that territory."

JUDGING THE SPEED OF A TRAIN.

BY E. A. SPEARS.

It Is Not So Easy as It Looks, and Frequently, When You Are Going at What Seems to Be a Sixty-Mile Gait, You Are Running Only Thirty Miles.

"IT'S a pretty hard matter to judge the speed at which your train is going, unless you take out your watch and observe the mile-posts," said an engineer.

"Often, in case of accidents, the attorneys will try to pin you down to the rate you were running when you ran into Uncle Josh at the crossing. You can never tell, with accuracy, and I can conceive of conditions where you may be thirty miles an hour off in your estimate.

"You may think you are hiking along at sixty miles an hour, when, in fact, you are going but thirty miles. On the other hand, you may be moving along at sixty miles an hour and think you are traveling at no more than thirty miles.

"For instance, the engine makes all the difference in the world. Take one of those big-class fellows with wheels more than six feet in diameter, and, like as not, you will be sailing along at a sixty-mile clip and not half realize it.

"One reason is that there are four exhausts to every revolution of the wheels. These being large, the sounds of the exhausts occur at less frequent intervals than they do on smaller wheeled engines. The more rapid the exhausts, the faster you think you are going.

"Why, on some of those little old engines the

exhausts are so rapid that, by the sound, you judge you are eating the miles at a tremendous rate. Like as not, however, when you get to the end of your run, a message from the superintendent will be waiting for you to ask why you are late. That is what is liable to happen if you don't keep your eye on your watch.

"Engines are curiously deceiving that way. Some of those rickety old machines will swing you back and forth, toss you into the air, and jolt you until you think you are knocking off the miles like minutes.

"Here's another rule that leads you astray. The more you are tossed the faster you think you are going. For that matter, you can observe this while riding in the coaches. A wabby coach lends the sense of speed to a train. A Pullman is just the opposite—it skims along and you wouldn't know you were traveling.

"You may notice, too, that the condition of a road-bed makes a lot of difference on your opinion of train speed. The first thing in spring, when the frost gets out of the ground and the tracks are heaved and warped, you will wonder why you are dragging behind the schedule when you seem to be going so fast. It's the road-bed.

"The more you are shaken the swifter you think

you are going. It's a good rule, all right, for you have learned it from experience. The trouble is that you must consider whether you are being shaken up in an old engine and on a rotten road-bed, or on a good road-bed and in a modern locomotive. If you are being tossed about in a big engine on a smooth road, then your senses are not fooling you—you are going some.

"This merely goes to show that you must consider the circumstances.

"Another condition which affects your estimate is whether the cab is high from the ground. If it is comparatively low, as some of the older locomotives are, you seem to go faster than you do, because out of the corner of your eye the ground apparently speeds by swifter. It is the opposite in higher cabs. The rate of the passing ground, so to speak, does not seem so rapid. The farther you are from a moving object, the slower it seems to go. This enters in the mental calculation you make on the engine, although you may not know it.

"The direction of the wind and its velocity is another important feature which you don't think about in your calculations. If the wind is going your way, leaves and other objects blown through the air parallel with you sort of make it look as if your train wasn't much more than standing still.

"As you stick your head out of the window you don't find much of a current of air against you. It tends to make you feel that you are getting through the element pretty slowly. Nevertheless,

you may be swimming smoothly on at a sixty-mile gait.

"Every railroad man knows that a strong head wind cuts down the speed of a train, sometimes to a very material extent. The fireman knows that a strong wind requires a heap more coal to keep up steam, for the engineer must draw on his power liberally, that his train may hug the schedule.

"Yet, when you are fighting and actually creeping against a strong wind, you get the impression from it that you are driving on at a terrific rate. Poke your head out of the window where the wind jams your face and claws at your hair. The dust sweeps by at a smashing velocity; trees, grass, and weather-cocks all point in the opposite direction from which you are headed. That's the way things look when you are going by them rapidly. It all makes you think you are annihilating distance—until you look at your watch.

"When a man has used a certain engine for some length of time he gets used to its exhaust and its swing, and, consequently, these are less apt to lead him astray in his estimates.

"I suppose if one were to estimate the speed of a train without a timepiece, the best way would be to stand off at a distance of about two miles. Then you get a perspective. You could measure a mile with the eye, and the train would not seem to be going so fast but that you could get a fair estimate. Of course, this method depends entirely on one's eyesight.

DOG WITH A RAILROAD PASS.

THERE is a dog on the Long Island Railroad that nobody owns and that does not want any one to own him. At the same time he probably has more friends than any other dog in the United States, and he is believed to be the only dog in the world that owns a railroad pass.

His name is Roxie, and upon his collar is a brass plate with an inscription which sets forth that he is an employee of the Long Island Railroad, and which commands all conductors to pass Roxie between stations.

It is said that this pass was issued to Roxie by order of the president of the road because a brakeman had tried three times to kick Roxie off the president's private-car. When the president and his party inquired into the cause of the trouble between the dog and the brakeman they soon learned the dog's history, and not only was the dog made welcome to a seat in the private-car at once, but the pass was issued to prevent any further interference with Roxie's peregrinations.

Roxie's occupation in life is railroad traveling. How he came to take his first ride and whom he belonged to before that time are both disputed points. Roxie himself is silent on the subject, although he can express his opinion of men and things clearly, and can make his wants known.

Curiously enough, Roxie will never make a return journey with the same train crew. After he has spent a day or so with one of his acquaintances along the road, perhaps a station-master or

a signal-tower operator or a switchman or the post-master or the hotel-keeper, he will take a notion to go down to the station and meet a certain train.

As soon as his train comes along Roxie jumps on board and appropriates any vacant seat he can find. If he cannot find a vacant seat he will curl himself up on the floor and doze quietly until he arrives at his destination. The moment his station is called he will jump up and get to the front platform ready to make off.

After a visit of what he considers the proper length he quietly boards another train and proceeds to some other station. It is considered lucky to have a visit from Roxie.

Sometimes he goes back in the direction from which he came; sometimes he goes further along the road. He has been at every stop on the road from Montauk Point to Flatbush Avenue hundreds of times during the last ten years, but he has never been known to go the entire length of the road in one journey.

As a passenger Roxie's tastes are very democratic. He does not seem to care much whether he rides in the cab with the engineer, in the baggage-car, in the smoker, or in the day coaches, but he seems to have some doubt about the validity of his pass for the parlor-cars, and seldom ventures into them, although he will enter the president's private-car with the utmost assurance that he will be welcome wherever an officer of the road is to be found.—*New York Sun.*

PETER THE GREAT.

BY S. O. CONLEY.

He Thought His Time to Reform Had
Come, but He Met a Bitter Opposition.

PETER McNULTY, known to the police and Cherry Hill as "Peter the Great," was not good to look upon — sprawling on a seat in Central Park, blinking with bleary eyes at nothing in particular, and hiccuping beerily at intervals. Under normal conditions Peter's claims to beauty were of a nebulous sort. Life that begins with frequent famines, punctuated by constant fist-fighting, and develops along the lines of the gutter, is not conducive to the development of attractive features.

Pete was squat and broad, with heavy jaws and huge hands. His eyes were small and penetrating. His ears were fleshy flaps with serrated edges—the result of East Side combats.

The Sons of Mulligan's Rest had been giving their annual ball and chowder at Schweitzermann's Wood. Pete was not only a "son," but had been appointed an assistant sergeant-at-arms of the affair. The position gave him innumerable chances to get square with his enemies. Consequently, the night and much of the morning had been given over to a glorious series of fights.

Finally, when Mr. Schweitzermann, with the aid of the reserves from a near-by police station, succeeded in regaining possession of his "wood," Pete, for reasons which he could not explain, steered unsteadily toward Central Park, the tawdry silk-and-tinsel badge which proclaimed him a son still glittering on his breast.

There on the bench he sat, drowsing, and dreaming of the joys of the preceding hours, and his face, battered by many fists and bloated by many libations, was not a pleasant sight.

Yet Freddie, pursuing an errant ball, was by no means frightened when, on turning the sudden curve of the path, he came upon Peter. The ball was rolling under the bench close by

Pete's feet. Freddie paused but an instant, then dived, secured his treasure, and took a critical survey of the huddled, frowsy man in front of him.

The badge caught his childish eye, and he came to the conclusion that the assistant sergeant-at-arms was worth cultivating. So he said "Hallo," and put out his small hand in confidential fashion.

Pete slowly opened his bleary eyes.

"Hallo, kid," he replied, taking the child's hand in his own big, grimy paw.

The man with his brutalized face, the boy with his unsullied innocence of feature, eyed each other in silence for a short time. Peter, under the influence of a sort of dull shame, tried to sit up straighter, and removed his hat from over his eyebrows. Freddie made a closer survey of his new acquaintance.

"Wot's yer name, kid?" asked Peter, with an effort.

"Frederick Wade Hilton, and I'se five years old," was the reply. "What's yours?"

"Peter de Gr— I mean, Pete McNulty. Wot yer doin' here all by yer lonesome?"

"Not alone. Nurse is just 'round the corner wiv Sister Beatrice. Sister Beatrice's only a baby. She can't walk. She has to be pushed in a baby-tarridge. Did you ever ride in a tarridge?"

"You bet. Why, I drives one." Peter quieted his fragment of a conscience by reminding it that onte or twice a year he really did hold a brief job as truck-driver.

"Wiv real horses?" asked Freddie anxiously.

"Sure, Mike—"

"My name isn't Mike—it's Freddie."

"Dat goes—" began Pete.

"What goes?" queried the child, looking round in order to see what object in motion Pete was apparently indicating.

Pete was perplexed. His muddled brain

was incapable of reshaping the phrase. He made no answer. Freddie, awaiting the explanation, again indulged in a scrutiny of Peter, and then it was that his eyes rested admiringly on the badge.

Pete caught the look, and divined its meaning. His unsteady fingers began to fumble at the safety-pin. Finally he managed to disengage the affair, and handed it to the child.

"Here, kid, here's sumpin' fer yez."

"Are you sure you don't want it?" he asked politely.

"Sure—it's all fer youse."

The boy took the badge with his left hand, and once more extended his right. Pete, with a hoarse chuckle of amusement, shook the small palm heartily.

"Thank you," said Freddie, examining his prize with shining eyes. Then, to the utter amazement and consternation of the man, Freddie, lifting up a trustful face, went on:

"I'd like to give you a kiss for this."

The pure lips of the little one touched the sin-seared cheek of the rum-soused thug.

Just then Freddie's nurse appeared on the scene, and forcibly hustled him off.

"How dare you kiss that dirty bum?" was what Pete heard as nurse and child started up the path.

Pete did not doze again. With wide-open, red-rimmed eyes, he looked speculatively at the squirrels. Once he began, "Well, I'll be—" but checked himself, and finished the sentence with his usual ejaculation of surprise: "If it don't beat three goats!"

Then he softly and surreptitiously rubbed his cheek where Freddie's kiss had rested. Soon he fell to gazing at the squirrels again. At length, hungry and thirsty, and bewildered at certain feelings in the region of his heart to which he was a stranger, he betook himself to the rear room of a near-by saloon, where, between gulps of lager and spoonfuls of free soup, he tried to wonder what had come over him.

That which rang most forcibly in his ears was the remark of Freddie's nurse, "Why did you kiss that dirty bum?"

For the next few days Pete was to be found in his old-haunts on the "hill" and at the "point," consorting with his cronies and swallowing the accustomed vileness called by the courtesy title of whisky. At rare intervals he would momentarily withdraw into himself, only to emerge muttering, "If it don't lay out three goats!" One day he induced "String" Murphy, who could read and write, to accompany him to a Bowery drug-store, where, with the assistance of a city directory, they

ascertained that one Frederick W. Hilton, broker, lived on Madison Avenue, not far from Eighty-Fifth Street.

"De kid's fadder, I lays me uppers," muttered Pete to himself.

String pricked up his ears. "Am I on in de graft?" he asked.

"Aw, wot's eatin' yez?" inquired Pete. "Dere's nuttin' doin'."

"Who's de kid, den?" inquired Murphy sarcastically. A life membership in an East Side gang somehow stimulates one's power of inductive reasoning.

Pete's eyes blazed. "If ever you slips me dat agen," he replied slowly, "I'll make youse t'ink you was—"

He drew himself up with a jerk. So, with a scowl, and a significant glance at String's jaw-point, he turned on his heel and departed. That night String bruited it abroad that Pete was either going to "turn a big trick" or was out of his mind.

Meeting Freddie in the park had curiously impressed the Cherry Hill man. The child had brought into being emotions to which he had been a stranger, and which were all the more bewildering because they seemed to run counter to the habits and thoughts of his life.

Somehow, they seemed to make him uncomfortable when he drank or cursed. In his dumb, darkened way, he felt the contagion that existed between them, and the purity of the lad who had kissed his rough cheek.

Half angry with himself, he cut short a string of blasphemy, and refrained from "touching" a half-drunken sailor—notwithstanding his needs and those of the gang.

Four days after his meeting with the child Peter didn't show up until noon. Then, in answer to several invitations to "beer his face," he explained that his insides had gone back on him, and he was "off de booze."

Later he strolled around to Lee Fong's laundry on Madison Street. Lee had decorated his window with some fly-specked prayer-papers, a sample collar, some cuffs, a shirt, an anemic lily that apparently derived its sustenance from superimposed pebbles, some cheap oriental vases, and a couple of goggled-eyed Chinese dolls.

Pete fixed a thoughtful eye on the dolls, and, after some hesitation, entered the store.

Now, Lee, having had much experience with the gangs of his neighborhood, and knowing that they visited him less for laundry than for loot, came forward cautiously, holding a flat-iron in his hand.

"How muchee, John?" asked Pete, indicating the dolls.

Lee understood, or thought he did. It was evident to him that his visitor intended a ruse. While the dolls were being taken from the window there would be a descent on the cash-drawer and the incidental lifting of stray linen.

Therefore, Lee replied: "No sellee."

"Yez won't!" returned the disappointed Pete. "Bet yez t'ree goats yez will."

"No want sellee," returned Lee, keeping a wary eye on Pete, and waving the flat-iron gently but ominously.

Pete took a peep over the red chintz curtain at the rear of the window, made an appraisal of the dolls, dived into his pocket, pulled out a mixed handful of cigarette-papers, matches, tobacco, and small change, and, picking out fifteen cents, placed it on the counter. Then his hand flashed over the curtain and drew up a doll.

"S'-long," said McNulty as he opened the door to exit, "an' de nex' time a gent asks yez de price uv yer chink kids, yez had best be civil—see? T'ank yer josh, yer yellow, split-eyed wash-tub, dat I ain't sent de gang down to clean yer place out."

With the doll carefully snuggled in his capacious inside pocket, Pete walked toward Third Avenue, where he squandered five cents on a shave and ten cents on a hair-cut; then he boarded a north-bound car.

Pete, on reaching Central Park, wandered toward the point where he had first met Freddie; but Freddie was not visible, and Pete began little tours over the lawns and in the neighborhood of the menagerie.

After two or three hours had been spent fruitlessly in this work, he sought and found a shady seat, confessing to himself his disappointment, and wondering if, after all, the boy's acquaintance was worth the price of abstinence from his usual quota of booze and cigarettes, to say nothing of shaking the gang and the incidental disadvantages to himself.

Meditating on these things, Pete began to doze, and finally dropped off into dream-land. From that region he was brought back to earth by a shrill and familiar "Hallo!"

Opening his eyes, he saw Freddie in front of him, and Freddie's face plainly showed that he felt genuine pleasure in again meeting his friend of the badge.

"Morning, Freddie," said Pete.

"Good morning," replied Freddie, with an accent on the first word.

"How's de baby sister?" went on Pete, after an awkward pause.

"She's all right," replied the boy. "Have you any little sisters?"

"Naw," said Pete.

"Any brothers?" pursued Freddie.

"Naw."

Freddie looked puzzled, and a trifle sorry, but continued: "Where does your father and mother live?"

"Ain't got none."

The boy gazed thoughtfully at the man in front of him, and asked: "Who puts you to bed and hears you say your prayers?"

Peter the Great shifted uneasily in his seat. "I puts myself to bed," he asserted. "You see, I'se bigger and older than youse."

"Do you say your prayers all by yourself?" went on his small inquisitor.

Peter did not reply. Instead, he reached into his pocket and produced the doll.

Freddie took it with a grave "Thank you," and, after examining it closely, he said: "You won't mind if I give this to Beatrice, will you? I am a boy, and I don't play with dolls."

"Dat's dead right," assented Pete. "I never t'ought of dat."

"But," added Freddie earnestly, "I am much obliged to you."

At this moment there was an interruption. A French maid, wheeling the perambulator in which was baby Beatrice, appeared on the scene.

She looked suspiciously at Pete, caught hold of Freddie's hand, and led him away, threatening to tell his mother about his "talking to these brutal men." She also insisted that Freddie should throw away the doll, but on this point the little chap was obdurate, sticking to the toy manfully, while Pete grinned approvingly at his action.

From that time on for two or three weeks Pete, pretty nearly every fine day, was to be found in the park trying to speak to his small friend. Occasionally he brought with him some bizarre gift, such as a carved coconut-shell which he had managed to persuade a sailor friend to yield, a dried star-fish, bananas, and, in one instance, a highly colored lithograph of the Jeffries-Johnson fight.

Freddie's parents, acting on the reports of the French maid, naturally objected to the acquaintance that existed between the child and his queer friend. They harbored thoughts of kidnapers and other equally unpleasant individuals.

So it came about one day that Peter, clean, and sporting an immaculate collar and a breath devoid of the odor of tobacco and whisky, was warned by a park policeman that the park squad was "onto him," and that he had a good mind to take him to the arsenal on general principles.

This followed hard on a statement made to him by Freddie, while the latter's lips quivered regretfully, that he had been forbidden to speak to or to even look at his Cherry Hill friend.

Peter turned away from the park. That night, in the society of the gang, in an unavailing attempt to forget the boy and his affection for him, he imbibed more than his quota of whisky, only to awake the following morning feeling disgusted with himself and his surroundings.

He was not accustomed to take his rules of life from the police, and, in spite of the warning that he had received, he still continued to haunt those portions of the park where he knew his little favorite was usually to be found.

Sometimes he caught sight of the child, and felt himself rewarded for his trip up-town. On his endeavor to speak to Freddie, however, the boy, with tears starting to his eyes, would always answer: "I can't talk; mother says I am not to."

With a little sob, he would pass on, leaving Pete to wander gloomily down-town, feeling a distaste for the "hill" by contrast with his late happiness up-town.

One day Pete, in spite of himself, had again journeyed to the park, and late in the afternoon was leaving it at the Sixty-Sixth Street entrance, sullen, weary, and disappointed. As he ascended the steps he saw, to his delight, in front of him Freddie and Beatrice, accompanied by their white-capped guardian.

Not daring to show himself, and yet eager to look once more upon the face of the boy, he followed them cautiously up the avenue to Seventieth Street.

There the nurse and her charge started to cross the street. The avenue was crowded with moving vehicles. Between them the nurse thought she saw an opening, but an automobile suddenly bore down upon her, and simultaneously from the other direction more carriages began to shut her in.

The automobile did its best to slack up. But—a tire snapped. The report started two spirited horses just behind. Instantly the animals began to rear and tug furiously.

With a shriek, the panic-stricken woman abandoned the children, and sought safety in flight.

Peter had seen it all. He dashed in under the heads of the crowding horses, and, in one instant, over the driver's seat. He reached the children just as one of the frightened team struck the baby-carriage.

The next moment he had swung Freddie onto his shoulder and rescued baby Beatrice from the entangling folds of her lap-robe, handing her to a scared coachman behind him. Then, in some miraculous fashion, he managed to make his way to the sidewalk, being grazed on the forehead by a glancing shaft.

Freddie was in a state of childish panic. Indeed, Pete had a good deal of difficulty in holding the terror-frenzied child in his arms until the sidewalk was reached.

There the little fellow's fear-befogged brain somehow or other identified Pete with the incidents of the moments before, and he shrieked to his rescuer to put him down.

"Dat's all right, Freddie," began Pete soothingly.

"Let me go! Let me go—you dirty bum!" shouted the child. And he struck at Pete's face with his tiny fist.

The Cherry Hill tough put the child on his feet without another word. Freddie was at once taken possession of by the nurse.

Pete turned on his heel, his cheeks an unpleasant yellow.

"I wouldn't have t'ought it of the kid," he muttered, with a curse. "His going back on me like dat."

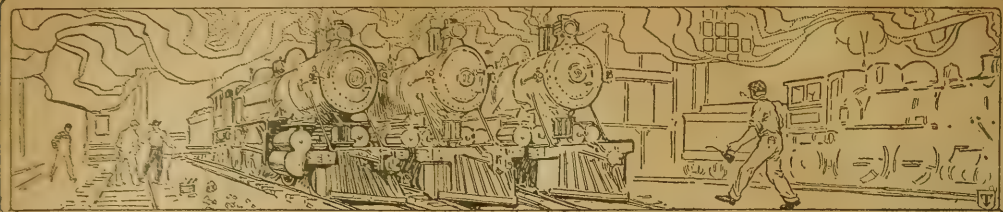
"I saw you rescue those children," said a well-dressed man. "It was a courageous act. Will you take this?" He held out a bill.

Pete laughed bitterly. "Nix," he said, and walked away.

That night Peter the Great was his old, tough self again. To fitly celebrate his return to his old life, he "did up" a cop "good and plenty."

About a year later, when he fell into the clutches of the law, owing to a difficulty with the leader of a rival gang, during which the latter had three conical pieces of lead distributed through his person, the judge, in sending Pete "up the river" for a term of years, took occasion to say that men of his type seemed to be outside of all influence for good and that their reformation seemed to be impossible.

Hot journals make no steam. Keep your enthusiasm where it will drive pistons.—Admonitions of an Old Hog Head.



WHEN THE ENGINE'S IN THE ROUNDHOUSE.

BY J. EDWARD HUNGERFORD.

Written for "The Railroad Man's Magazine."



WHEN the engine's in the roundhouse and the weary
day is done,

Hi, old pardner, ain't you thankful that the trip
is safely run?

Ain't you glad to shed your jumper and to wash
away the grime?

Ain't you glad you're feelin' hungry and it's close to supper-
time?

Ain't you proud you've done your level and you've earned an
honest rest?

Don't that feelin' of achievement make you kind o' swell your
chest?

Ain't you glad the kids are waitin' for you, swingin' on the
gate?

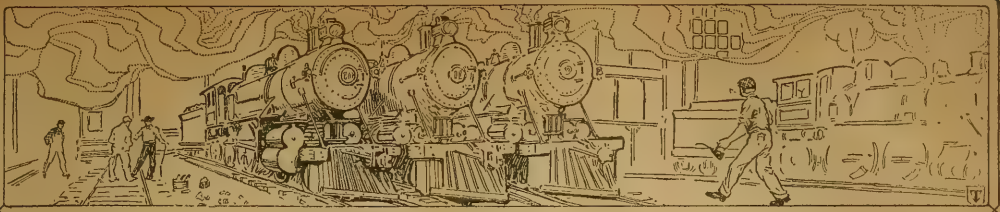
Don't you kind o' hustle homeward so they won't have long to
wait?

Ain't you pleased to see wife standin' in the doorway with a
smile?

Don't the greeting that she gives you make your struggle worth
the while?

Ain't you glad that supper's ready and the grub is piping hot?

Don't you fairly love the perfume of the steamin' coffee-pot?



Ain't it solid comfort, pardner, when you've settled down to eat?
Don't the way wife serves the victuals make each morsel seem a
treat?

Like as not it ain't a banquet — just 'plain spuds and beef and
bread,

But you've got a bank-roll started and you're gettin' some ahead.
Oh, it's good and appetizin' if it is a little plain,
And it builds up pounds of muscle and it stimulates the brain.

Ah, but when the meal is finished and you're smoking in the yard,
And the youngsters romp around you—ain't you glad you're livin',
pard?

Don't you love to tell 'em stories, just to hear 'em shout with
joy?

Don't you like to tease the girlie 'bout some little neighbor boy?
Don't you like to play at choo-choo with the children on 'your
knee?

Honest, pardner, ain't you proud of them as mortal man can be?

Then's the time you plan with wife on the good day drawin'
near,

When you'll quit the job of fireman for the job of engineer;
You have served your time at stokin'—it's been hard old goin',
too;

But it won't be very long now till some chap'll stoke for you.
Hi, old pardner, ain't that plannin' in the future heaps of fun—
When the engine's in the roundhouse and the weary day is done?

THE MAN WHO WASN'T GAME.

BY WILLIAM S. WRIGHT.

Some Men are Won by the Lure of
Gold—Others by the Lure of Love.

CHAPTER XII.

My New Acquaintance.



HE stranger's cottage was a small affair. It consisted of just two rooms, and they were as devoid of any of the comforts of home as any place I had ever seen.

One dilapidated chair, a table that had lost two of its legs in a scrimmage of some sort, and was propped against the wall for support; a shelf on which rested the occupant's toilet appliances, and the inevitable sleeping-mat on the floor—that was all.

The cottage was thatched with coconut-leaves, the walls were of rude undressed planks—but the view from the window was a fascination.

The stranger, as I have said, was a squat, middle-aged man. His hair was long and white, and his face was covered with an unkempt beard.

His tiny black eyes were popping nervously in their sockets as if he were fearing some dire calamity at any moment. He seemed to be the allegory of fright. There was something on his mind that was troubling him.

He offered me the lone chair and sat himself on the floor with the easy manner of the natives, who, as I have said in previous chapters, adopt the "tailor-fashion" attitude with peculiar ease and grace.

Akipo entered soon after and took his seat carelessly in the middle of the floor. I wondered why the stranger made no objection to the native's presence if he had something secret to tell me, and I was not a little surprised that he did not order Akipo out.

I learned afterward that the native idea of personal privilege is vastly different from our own. The fact of the matter is this:

All things being equal to him, he feels that his presence is ever welcome, no matter where he may be, and he takes everything in such a gentle, philosophical manner that there is little or no objection when he comes around. At any rate, Akipo could not understand English beyond the veriest "yes" and "no," and the stranger knew that.

When Akipo had seated himself the stranger turned to me and told his story. It was a rambling matter at first, for his tears flowed faster than his words, and he frequently choked with such terrific emotion that he could not speak.

"My name is John Pennzer," said he. "What I am going to tell you is the gospel truth. Oh, my friend, I have been waiting so long to tell it to some one! I have cried it out to the stars, but they could not hear; I have hurled it to the sun and the great ocean, but they go on and on as if they did not care!"

He wrung his hands in anguish. It was evident that my stranger who—to give him every benefit of the doubt—was really John Pennzer, was a poet, too.

"I am glad that I can understand you," I said. "Let me know how I can help you."

"You can help me by listening," he continued. "This awful secret has been a weight on my breast for years. Let me tell it to you. Some human being must know it. Some one who *can* understand."

"Go on," I said.

John Pennzer looked at Akipo for a moment, and Akipo was in the position of a mute at a Greek tragedy—he could only understand by the gestures that something unusual was going on.

Pennzer was satisfied with Akipo evidently; then he looked me straight and steadfast in the eye for fully a moment, and said:

"I am a bank-robber."

Fearing that this admission would deprive me of either breath or reason, or both, he stopped for a moment to await the effect.

But I was prepared for that, and even more. My intuition told me that John Pennzer was either a bank-robber, a murderer, or some other sort of escaped criminal. I imagine now that his surprise was even greater than mine when I looked at him in bland calmness and simply replied:

"Yes."

"I am a bank-robber," he repeated. "I have been on this island, an escaped criminal, for over ten years. I dare not write to my family for fear that the police will intercept the letter and come for me. For years, every time that a boat of any sort approached the shore, I scanned every face aboard, fearing that a detective had come for me; and when you drove up just now I thought that my time had come.

"Oh, I would not care much! It has been like prison here all these years. The strain on the mind has been worse than purgatory.

"If I had only given myself up and gone to jail—if I had only given myself up and gone to jail—the judge might have had mercy on me, and I would have been a free man now—a free man instead of a prisoner here."

I knew all this was coming, and I suppose that I looked at him somewhat disinterestedly. However, he gave me a sudden, startled, piercing look, and said:

"Are you sure you're not a detective?"

"Most certainly not," I answered. "I am, as I have told you, a wanderer—a wanderer on the face of the earth. I just dropped onto this beautiful island as a meteor drops from the sky, and I like it so very much that I think I will stay here always."

"You will like it and will live happily, for you have your conscience," he went on. "No man can live happily without his conscience—clear and clean. He may have riches and luxury, and all else that the world can give, but conscience is his best companion.

"This paradise, with all its natural wonders—even with that view which you can see through the door—has been to me nothing more than a prison."

He stopped short in his preachment, and said:

"Oh, I promised you some refreshment."

Then, turning to Akipo, he rattled in the latter's tongue an order for coconuts.

Akipo was on his feet in a moment. Ta-

king a stout piece of rolled twine from the folds of his *pareu*, he deftly knotted it to each big toe. I was more interested in his immediate undertaking than I was in Pennzer's confession, and unto the native I fastened my attention.

The twine which Akipo had fastened to his big toes was about fourteen inches in length, just sufficient to give him leeway to hobble into the yard. He maneuvered to a tall coconut-tree some hundred yards away, and, using the string as a means of locomotion, he scrambled to the top, and soon we heard the welcome thud of young green coconuts as they struck the ground.

The coconut-tree, I may add to this tale, as a means of information, is very tall and of the palm variety. All of its foliage grows at the very top. The leaves are long and tough, and the fruit grows in mighty clusters in their cooling shade.

A coconut in its green stage—and in its green stage its milk is one of the most satisfying, wholesome beverages known—is about as large as a man's head. Every part of the tree is useful.

As one famous South Sea writer has truthfully said, to the native it is meat, drink, fuel, fire, and wearing apparel.

When the natives climb the trees for the fruit, they look something like a monstrous cat leaping up a pole. The hands work in the same manner as a feline's paws, and the legs are drawn up in unison—the string attached to the toes catching in the bark and acting as a support.

Akipo soon returned with coconuts, opened them, and placed them within easy reach. John Pennzer picked one up and, raising it to his lips to drink, proffered my very good health. Out of courtesy, I did likewise. We quaffed the wonderfully cooling milk, and then he proceeded:

"Do you remember the robbery of the old Eighth Ward Bank in New York—some ten years ago?"

He peered at me inquisitively, and then continued:

"No, you are too young."

"I have never been in New York," I ventured.

"Even so," said John Pennzer, "had you been old enough, you would have heard of it. Of all the bank-robberies of the past quarter of a century, that was the most sensational. Why, there were columns written about it, my boy; columns, mind you."

He stretched his arms in seeming pride, and the basso tremolo of his voice indicated

that it was something to have been the central figure of a bank-robbery.

"But I escaped. They never found me. They are wondering to this day where I am. You are the first white man—indeed, my friend, you are the only man in all this world to whom I have spoken about this affair. You have never heard the story?"

I shook my head.

CHAPTER XIII.

The Pennzer Proposition.

LISTEN then, and I will tell you. "I robbed the old Eighth Ward Bank on the night of June 11, just ten years ago come next month. Oh, I have kept most careful count, and I know.

"There was a bundle containing just one hundred thousand dollars in ten, twenty, fifty, and thousand-dollar notes in the vault. It was a sort of reserve fund, and it rested in a steel drawer, untouched for years. I was the security clerk, and frequently I was obliged to go to the vault to examine some security or to make an inventory of those on hand.

"One day I saw this bundle of notes—a fortune. I saw it again and again, always the same smiling welcome friend of the vault. I seemed to grow to like it—and I use the word in its emotional sense," he said with a long-arm gesture, as if priding himself on his rhetorical finesse.

"Yes, I began to feel a certain liking for that bundle of bills," he continued. "At first, when I would open carelessly the steel drawer, it seemed to smile at me, and I distinctly remember saying one day: 'Hallo, there you are again!'

"Then I began to discover that I could not go into the vault without a look at the bundle, and I soon found myself opening the drawer and actually speaking to it, whether I had to go to that particular drawer or not.

"The bundle seemed so lonesome, and when I would shut it up in that dark abode it seemed to just want to come out.

"One morning, it must have been three months or more after the day that I first saw that attractive bundle, I was obliged to change its position in the drawer to make room for some very valuable securities. Up to that time I had never touched it.

"To me it was like a living thing, and I remember that I placed my hand on it as if it were a little child whose position in its cradle was uncomfortable. But the moment my hand touched it!

"Then it was a different thing to me! Then it became more than a mere bundle of printed paper, calling for so much metal! It became a—a beautiful woman, begging pleading, demanding that I take her from her prison.

"I placed the notes most carefully in their new corner which was nearer the outer edge of the drawer, and, as I closed it, I took one lingering look and *I know* that they beckoned to me.

"That night, I lay awake for hours. Those notes were within my grasp. They called for one hundred thousand dollars in the coin of the United States. They could bring me all the happiness that a man could ask. They were within my grasp.

"I only had to take them!—I only had to take them!

"I actually found myself lost in the contemplation of a theft!

"Here I was actually planning the theft of one hundred thousand dollars with as much unconcern as if I were planning a journey to Coney Island.

"I hastily pulled myself together. Great God! What had come over me! I tried then and there to upbraid myself for letting myself think such a thought! I, John Pennzer, who was the soul of honor and unto whom had been entrusted the wealth of trusting employers—I who was looked upon as a model for young men—the father of a family—the pillar of a church—letting myself think such thoughts!

"I remember that I upbraided myself and then went to sleep. The next day, while walking to the bank, my heart sank within me because I had been such a weak fool. I resolved to never again let my mind rest on a dishonest idea and if that bundle of notes had the power to make such a fool of me, then I would put it where I would not be obliged to see it and dismiss it from my mind.

"But when I opened the drawer that morning, a more welcome smile than usual greeted me.

"I shut the drawer with a slam. But, I thought, I was cruel. I opened it again. Curse me for a jackass, but I really seemed to feel that that bundle of bills needed fresh air and chance to look round."

Pennzer actually laughed at the peculiar ridiculousness of his statement.

"So I left the drawer open while I was examining some securities, and, now and then, I would let my eyes turn in the direction of the bundle.

"Finally, the time came to go. I turned to the drawer to close it. Something stayed my hand. It was impossible to do other than to pick up that precious bundle.

"I did so. I spoke to it. I caressed it. I toyed with it. God help me! At length I opened it!

"I laid the bills one by one on the little shelf above the drawer and my eyes feasted in jealousy that they should belong to some one else and not to me. Then, lest some one enter the vault and become suspicious of my innocent escapade, I made up the bundle just as I had found it and put it back in its proper place in the steel drawer.

"What I say may be either grewsome or insane to you, my friend, but that bundle again assumed the—oh, I do not know what to call it, but to me it was a living, breathing thing.

"It seemed broken-hearted—there, there don't laugh! It actually seemed broken-hearted and it began crying to me—yes, crying aloud:

"Take me! Take me!' it seemed to say. 'Don't leave me here to suffer alone! You need me. Take me! Take me!'

"I petted it tenderly. I went on with my work and went home that night only to suffer worse than I had suffered the night previous.

"I managed to get myself out of the spell of hypnotic influence of the thing and to look at my position calmly. I reasoned that there was the enormous sum of one hundred thousand dollars within my grasp. That sum was a princely fortune. With it I could flee to some foreign country, hide myself for a while, and then my future would be secure, for with such a sum a man of my tastes would be satisfied.

"Then I tried to throw it off, go to sleep, and return to my natural state of mind. I resolved that I would ask the cashier of the bank to remove that bundle in the morning. I could tell him that it was in my way, or invent some other flimsy excuse, and he would gladly do it.

"But all this good resolving vanished like the mists on yonder sea. The spell of the coin, the call of the cash, the lure of the lucre, or whatever your mind chooses to call it, had me in its grip.

"In a little while it was all over. I had resolved to steal that money. That was all there was to it.

"Something impelling was working against my better self. I had lost all reason for anything else. There was only one thing to

do now, that was to plan the robbery so that no one would intercept me—and make good my escape.

"The most feasible plan—after I thought of a dozen and discarded them all as worthless—was to lock myself in the vault or, to be more exact, remain hidden in the vault until the automatic machinery, operated by the giant timepiece in the bank, closed it for the night.

"I would have a candle and matches. The getting of the money proper meant nothing. I had only to open the drawer and extract it.

"Then, with a small screwdriver, I would unfasten the lock from the inside just as I had seen a mechanic do one day when fixing it. I knew the principle that operated the door and I was certain that I would succeed.

"Once outside the vault, it would be an easy matter for me to make the street. The only opposition that I might encounter was the night watchman, but as he kept his vigil near the front door, and as I intended to make my exit by the rear, I anticipated no trouble from him.

"That day, I worked in my customary mechanical style as if there was nothing out of the ordinary on my mind. We clerks get into a rut and there we stay. Just so long as we do the work and our honesty and trustworthiness are never questioned, nothing is said to us.

"About twelve minutes to three o'clock I took a farewell look at all my bank companions. Some of us had worked together for over ten years. Then I gathered up all my papers, slipped them into my desk, and taking what securities I had before me, I started for the vault.

"One of the bookkeepers was just ahead of me. He was putting away some private papers belonging to the president of the concern. He chatted pleasantly, for we practically entered the vault together.

"I breathed a sigh of relief when he hastened out, saying that he was leaving early to catch a train. The moment he left, I peered out and into the bank. It lacked three minutes of three o'clock. At first I realized that not a person knew that I was in the vault, but the moment that I hid myself in the rear behind a patent cabinet used for storing railroad securities, it seemed that a million eyes were on me.

"Those three moments went like so many years. I crouched down, for some belated clerk might possibly rush in at the last mo-

ment to leave something for safety—and if I were seen—great shivers!

"I began to tremble and a cold perspiration poured from my face. I looked at my watch. It was just three—the minute hand was just touching the tiny mark of the hour.

"I peered around the corner of my hiding place.

"Suddenly there was a muffled click. Quicker than it takes to tell, the huge steel door of the vault swung to and, with the ease and wonder that marks the method of improved machinery, it closed.

"It closed and the daylight vanished. I crouched lower in the darkness, waited with bated breath for a moment, and then came another muffled click.

"The vault was locked. No human hand, no key, no power save destruction could open that door now—not until ten o'clock the next morning when the giant clock that had closed it would point to the hour of ten.

"That, at least, was the principle on which it worked and on which its makers built it. But I was in its vitals now—and my skill had to prevail.

"The darkness was cloying. I struck a match. As it flared up, I looked about my prison to see if there wasn't a chair. Nobody had thought to put such a commodity there. How careless are inventors regarding bank robbers!

"Just as the match went out, I looked at my watch. Only four minutes past three! The clerks were still working. They would not leave until five o'clock. Then the charwomen would come in and clean the place for the morrow. It would take them an hour or so and then the watchman would go his rounds and take his comfortable chair to his place near the front door. The weather was warm, and the board of directors let him keep a window open.

"I figured that I would want to make my escape at night. The best hour would be about midnight, but when I thought of waiting in that awful blackness for nearly nine hours, I felt that my reason would leave me.

"I was standing up and my legs began to cramp. I walked to and fro, but I encountered all manner of obstacles. It was impossible to move with any degree of comfort. Then I tried standing still again. I remained perfectly restful for some fifteen minutes and, in sheer desperation, I sat on the floor.

"I soon regretted the absence of drinking water and again I spoke most unkindly of the neglect of safety-vault manufacturers re-

garding thieving bank clerks. Indeed, they might have given me a chance to go outside and walk around until I was ready to steal their money.

"I sat there staring into the darkness which soon began to blur my eyes in such a manner that it soon seemed to me that I could even see every corner of the vault. I even put my hand on the steel drawer which contained my hundred thousand dollars, and I could see the bills all piled up in order awaiting the possession of him whom they had tempted to crime.

"But that terrible darkness became too awful for words. I shut my eyes to keep it out—that is the only way in which I can express myself. With my eyes closed, my mind seemed more at ease. I stretched out on the floor. I began to dream of the morrow when I would be the possessor of one hundred thousand dollars—think, my boy, one hundred thousand dollars!

"I planned and planned. I went into a reverie of rarest delight. It was important that I should do so, too, for my mind had to be distracted and my eyes kept from dwelling on that terrible darkness.

"At length, I could feel myself falling asleep. Oh, it was welcome. Better asleep dreaming of the glorious future in store for me than awake in that narrow confine with no sound save my watch ticking, ticking, the moments that never seemed to run into hours.

CHAPTER XIV.

The Hundred Thousand.

SUDDENLY, I remember, I awoke with a start. The mind quickly knows its surroundings even though the sleeping body may be in strange quarters.

"I sat up quickly, struck a match and looked at my watch. It was ten minutes to eleven. Why wait until midnight, I thought? Why not begin now? It was night. The breaking of the lock might take some time. This was the appointed hour.

"I rose to my feet, lit the candle, and placed it on the shelf above the drawer. Then I opened the drawer and took therefrom the bundle of bills. I quickly deposited these in the big valise that I had brought for the purpose, and the theft was not more than I could master when I had made my freedom.

"Then I turned to the door of the vault. With my screw-driver I began to unfasten the plate that covered the mechanism. It

was unusually difficult, I thought. The number of screws seemed endless. Finally I had them all out, and the plate fell to the floor with more noise than I had anticipated.

"Gingerly I began to prod the various springs and wires that held the lock fast. I was working blindly but more successfully than I knew.

"I touched some vital part. There was a sickening sort of a thud, a short succession of clicks, and the door swung open with a bang!

"I had just time to extinguish the candle and dart behind the cabinet. I listened with my heart going against my breast like a trip-hammer. Bang! bang! bang! it went with the regularity of a pendulum.

"I feared the worst. The watchman had only to touch a button and the entire building would be thrown into a flood of light. But—he was asleep. I plainly heard him snoring.

"There was a dim light burning in the outer offices near the door. This was sufficient to guide me.

"I made my way to the rear of the building where I was well acquainted with a small door used only for the transfer of specie. It opened on a small alley that connected with the main street. This door opened only from the inside. It was held locked by a series of bolts similar to those used on a safe, and was operated by a combination which was known only to three members of the bank, including myself.

"The combination was '34 left, 72 right, 48 left.' My nervous fingers could hardly turn the knob. They seemed powerless to work properly.

"I struck a match. I scarcely cared if I aroused the watchman, for I might as well be caught one way as another. In the dim light I saw the knob turn from left to right to the different numbers. I could hear the gentle roll of the ball-bearings, and then the welcome clicking sound that told me that the lock was in my power.

"I pulled the handle and the door opened. I picked up the bag containing my treasure and darted down the alley to the street.

"My next problem was where to go. An old detective has told me since—not knowing, of course, who I was—that the cleverest thieves will plan a robbery to the minutest detail, and then, having come into possession of the plunder, will fall into the clutches of the law by not knowing what to do with it.

"I was in this very quandary. The streets were deserted and dark. Everything was

propitious for a deed of the kind I had just committed. I had the spoils in my hand.

"But where could I go?"

"Nowhere! In the morning the theft would be discovered. The escape by the rear door would fasten the crime on the three men who knew its combination, and I would be the only one who could not prove an alibi! I was the only one of the three who knew that the notes were kept in the drawer!

"Well, my friend, I would have given twice the sum to have been able to return those notes. I would have given years of my life to have been able to go back just twenty-four hours. But it was too late.

"I went to the railroad station and took an early train for Chicago. That afternoon the newspapers contained full accounts of the great bank robbery in New York and my disappearance.

"Descriptions of me were being telegraphed to every city in the world. I hid in the back room of a saloon, and now and then emerged to get the extras as they came out. All night I walked the streets with my hundred thousand dollars, and every time I saw a policeman I dodged down a side thoroughfare.

"The morning papers proved that I was the most talked of man in the country. Everything connected with the robbery had been sent broadcast, and a reward of five thousand dollars was offered for my capture. I did resent, however, the statement made to the press by the sleeping watchman. He told, in the most graphic atmosphere of the fiction-writer, how I had overpowered him, gagged him, and bound him to a chair, from which he had freed himself only after the most difficult struggle.

"I saw that I had only one thing to do, and that was to leave the country. I made my way by a circuitous route into Canada and then down into Mexico, and finally to a Chilian port.

"There I found a schooner bound for this island. I was a traveling naturalist, and the bag containing my hundred thousand dollars was filled with valuable and perishable specimens, which was my reason for keeping it locked and handling it so carefully.

"Oh, the world is full of fools! We are all gullible! It doesn't take much to make us believe that the motto of wise *Puck* deserves a prominent place on our escutcheons.

"I landed here. The years have passed, and I am still unmolested. You are the first man whom I have taken into my confidence. I can't stand this isolation much longer, so I am going to make you a proposition."

He stopped talking for a moment, then turned to Akipo, to whom he spoke. He evidently asked the native to leave the room under some promise or other, for Akipo smiled and went out to the small porch, where he dropped on his haunches, took a long piece of coconut fiber and some native tobacco from his *pareu*, and began rolling himself a cigarette.

Pennzer arose and closed the door, being careful to bolt it.

"Is it necessary to do that?" I asked.

"Yes," he replied. "I want to be alone with you. I want to show you."

He looked furtively around him, and then disappeared into the other room. I heard a key turn in a lock, and presently he returned with a good-sized traveling-bag. This he placed at my feet. He opened it, and brought forth bundle after bundle of United States bank-bills.

"This is what I have left of the loot," he continued. "I really do not know how much it amounts to now. I should say that I have not spent more than two or three thousand dollars. At any rate, if you will agree to return to the United States and offer the bank from which I stole this money seventy thousand dollars in cash, I will give you ten thousand dollars for your trouble."

"The proposition must be closed in this way: I am to return through you seventy thousand dollars of the stolen money provided the bank will give a written agreement that I am to have my freedom."

I thought it over as he packed up the notes and returned to the adjoining room with the bag. There was more money than I had ever seen before. I might make my demand for my share of it in advance. Then, if I cared to vamoze with it, he would be none the wiser.

With ten thousand dollars I could—I found myself in the same lure that had trapped this unfortunate man and wrecked his whole life. Great grief! but it is a mesmeric power.

In the short time that elapsed while he was transferring that bag of stolen money to its place in the outer room, such thoughts flashed through my mind that I would blush to record here.

I even thought of murdering him and making away with the entire sum. What is this awful money lust? Why is it the most poignant and damnable of all powers? I now understood why he could not resist the temptation.

When he had finished his story I de-

spised him; now I sympathized with him from the bottom of my heart.

He returned to the room, and said:

"You need not give me your answer now. There is plenty of time. I can wait a little while longer. Go home and think it over; but I will ask one thing."

He was looking at me with steady eyes.

"What is that?" I asked.

He reached for my hand. Just why I gave him no resistance I do not know. At any rate, he clasped it warmly, and, looking me straight in the eyes, said:

"I have told you a great secret. I trust in you—man to man. If you should deny me the acceptance of my offer, promise me that you will never, never breathe a word of it to a living soul."

I promised him.

CHAPTER XV.

The Lure That Won.

I LEFT him, and aroused Akipo, who was now enjoying one of those siestas into which the south sea islander falls so easily. He was stretched out, fast asleep. Even the antiquated horse of our conveyance was so sound asleep that his nostrils almost touched the ground.

I ordered Akipo to drive home, meaning, of course, to the place where Tati lived. He lashed the poor beast unmercifully to wake him from his slumbers, and off we started through the idle town to the rose-embowered palace of the woman whom I loved.

Everywhere the idle breeze wafted the fragrance of the spices that grew in the valley lands; everywhere the sunlight shone, bringing every color that nature had endowed on this fairy-land to its fullest and best tint.

I saw the idle people sleeping in their undisturbed peace, and even the plants seemed too lazy to waft with the recurring motion of the breeze. It was the perfect place. It was the place to live.

And when we finally reached home, Tati, too, was asleep. In a hammock swung under the climbing flowers that bordered her porch she reposed. Her wonderful face seemed wreathed in the smile of a beautiful dream, and I approached and kissed her as a mother would kiss her sleeping child.

She awoke with a little start, and looked at me. Then she held out her arms.

"Would you do me a favor?" I asked.

"I would do anything for you, my *Merita*," she replied.

"Ask Akipo to return to the village and tell the stranger at whose cottage I stopped that I cannot accept his proposition."

"What do you mean?" she asked, a little startled. Her eyes seemed to say that she feared something had come into our lives that might part us.

"I will tell you," I said. "Only, please send Akipo. Just say this to him: 'Tell the old man who lives in the cottage where you stopped this morning that the American cannot accept his proposition.'"

She called to the native, and, in the beautiful language of her land, gave my wish. Akipo, evidently thinking that he could make faster progress than the horse, started off afoot.

I told Tati all that had happened. I admitted frankly that I was committing the nasty, underhanded crime of breaking my word after I had given my promise not to do so, but I admonished her that I only did so because I loved her better than all else in this world, and that if she loved me as she said she did she would keep the old man's secret with me.

She told me that it did not interest her sufficiently to give it another thought. We changed the subject, and set about preparing for the trip to her father's, where I was to be formally presented as his future son-in-law.

It was our intention to start early the next day. Tati and I were to ride horseback as far as Poora, a native settlement near the sea. Then we would embark in a rowboat with six lusty men at the oars. In this boat we were to live for three days—the length of time needed for the journey.

While we were packing what few belongings we required for the trip, Akipo returned. He told Tati, who acted as translator, that Pennzer wanted to see me at once. I tried to gather from Akipo some inside idea of the nature of the old man's demand, but Akipo only seemed to be aware of the one request—that the old man had to see me that moment.

I felt that I at least owed him the courtesy of a decent reply, so I went to his cottage, with Akipo to guide my footsteps. I found him seated on the little porch. He bade me enter, and ordered Akipo to stay outside.

Once inside, he locked the door as before, and said to me:

"The native brought me your answer, but I want it direct from you."

He didn't seem angry so much as hurt.

"I simply can't do what you ask," I said.

"Why?" he ventured.

"I really don't care to mix in your case," I replied. "In the first place, I do not think that I could do you any good service."

"And, in the second?"

There was no particular reason why I should beat around the bush.

"I have decided to stay here. I like Moona. I am going to make it my home," I said.

He was visibly disappointed. He raised his hand to his forehead and wiped away the perspiration gathered there in great drops. I saw the tears come into his eyes. He seemed to be unable to speak.

"Caught in the spell," he said, his voice choking with emotion. "My boy, how many have been caught in this wonderful island spell? But you will regret it. You will live to see the day when you will regret it with all your heart. You will long for your own country and the advantages it will give you. All this sunshine, this laziness, these women—"

He stopped, and looked at me sharply.

"These women," he went on, "will grow old, and their beauty will pall you. Then you will long for your own kind. And they are false; they are wicked; there isn't one of them whom you would want to make your wife."

"Hush," I said, interrupting him; "there is!"

"Give her up!" he shrieked. "Give her up! You will regret it. Come! I will do more than I said. I will give you twenty thousand dollars if you will go back to America and convince the bank to do as I say. All that I want is my freedom. I will give you the money now."

Ere I was aware, he had run into the adjoining room. Before I could say aught, he was dragging the bag of notes from its hiding-place.

Now he was before me, his nervous fingers opening the lock.

"Put it back!" I shouted. "I want none of it!"

"You must take it!" he shouted in answer. "You must help me get my freedom."

He took up a roll of the bills nervously.

"No," I said, and made for the door.

Just as I was putting my hand on the crude lock, there was a tapping on the outside.

I stopped short.

The tapping came again.

I turned to Pennzer. He was returning the bills to the bag.

A voice—gentle and soft—was heard outside. It was very indistinct.

Then the rapping again, and then the voice, now louder. It was Tati's voice.

Pennzer heard her. A sarcastic smile played over his face.

"So there is the reason why you are going to stay! Ha, ha!" he laughed derisively. "So there is the reason why you are going to stay—the Princess Tati!"

Regardless of what he might think, setting aside the decorum that prevents a man from opening the door of his host, I drew the latch, and Tati entered.

There was fire in her black eyes, and anger was beaming in her face. She looked at me, and then she approached Pennzer and began to upbraid him. Akipo heard the angry words of his mistress, and entered, and a few passing natives added to the audience.

Tati and Pennzer hurled abuse at each other. Never did I want to understand a foreign language so badly. Pennzer showed the bad taste to give the girl two words for her one, and, whatever else the row was about, I was certain that I was the center of attraction and that Tati was abusing the absconder for wanting to take me away from her. When I thought that it had gone far enough, I walked up to Tati and took her hand.

She came along willingly, but she hurled some verbal shot at Pennzer as a climax.

When we were on our way to her house I asked what she had said.

"I told him that he was a meddlesome old man," she answered, "and that he had no right to take you from me. I told him, also, that it might be interesting to know just who he was, anyhow, and I dared him to show what he had in his bag. I said, too, that he might not care to tell why he was always afraid to speak to people—but, oh, I didn't even hint that there was anything wrong with him."

Oh, gentle woman, how alike you are the world over! What is your secret, anyhow? Where in your heart of hearts is a corner where man can hide one little word from all the world?

I didn't care. I only smiled. Who on earth could find anger in his heart for Tati? One had only to see her to love her; one had only to know her to believe in her.

I met her father in due time. After the three days' journey in the open boat—the six oarsmen taking their turns as watchers and rowers, now and then offering prayers for our safety—we arrived at the paternal home.

The father was glad to know me, glad to welcome me, and glad to add me to his family—and all because Tati loved me. He gave

me a plantation worth a fortune in his land. He gave me cattle and horses, and he gave me from his bag of coins—but he gave me happier days than I believed it possible for man to know, because he gave me his beautiful daughter—the Princess Tati, my wife.

Many years have passed since the incidents here recorded occurred. As I write, I am sitting on the broad veranda of my home in that garden of the gods—Moona, the fairest of the islands that dot that sunlit ocean of the western hemisphere, whose name is peace.

I look over the green tops of the coconut-trees across the vistas of my plantation, through a valley adown whose mountainside flow dozens of tiny waterfalls, and I see that ocean, so wonderfully blue and calm, kissing the long, white sandy shore of my island home. Was there ever water more beautifully at peace with the world?

Up from the valley comes the coolest, gentlest breeze, filled with a hundred odors of rare spices. Far to my right tall mountain-peaks rise in commanding power to the skies, and their topmost points are hidden in a veil of fleecy clouds. And just before me, on my own plantation, the ever-blooming flowers and the ever-growing fruits that the Almighty gives to the islander vouchsafe me the grandest sense of contentment that life can afford.

At my side, watching my pen glide over the paper, devouring my words as I write, sits the most glorious creature ever born—my little wife. Day by day her beauty grows more serene; day by day her love grows stronger; day by day I thank the fates that guided my erring feet to this haven of bliss—this wonderland of glory and happiness, of peace, love, plenty, and human kindness.

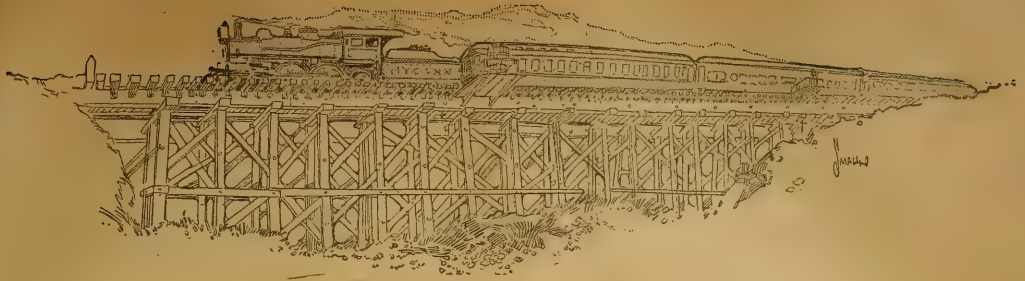
All ambition gone, except to live and love! All hope of the future banished for this paradise of the Pacific! All wishes to return to my native land—to see my home again, to take up my abode anew, to work for a great name and fame—

Bah! Not for worlds! Not for glory! Even had I the desire, I could not. I was caught in this spell. I am not game to battle against it. No, I am not game.

No, not for all of poor Pennzer's wealth would I give one thought to anything but my life, my love, and my happiness. In parting, just one word about that misguided man.

They found him one morning lying prone on his floor with a bullet in his heart. His unspent, stolen fortune—the lure that got him—was scattered all over the room.

(The end.)



A Remarkable Record for Safety.

BY BERTRAM ADLER.

EVERY little while the statement is made that American railroads are far behind those of Europe in regard to the protection of the traveling public, and figures are often quoted to throw discredit on the great systems of this country, many of whose records have stood for years unmarred by a single fatality.

The facts published in this article have been obtained from government reports and other sources of a most trustworthy character, and give the lie direct to those who attempt to prove that railroad travel in this country is more perilous to life and limb than it is abroad. In fact, few foreign safety records compare with those made during the past few years by our own railroads, whose up-to-date methods of train-despatching and signaling have brought about a condition bordering on immunity from serious catastrophes that is almost phenomenal.

Figures Which Free Travelers' Minds of the Horror of Railroad Accidents, and Cause Them to Pin Their Faith to the Con, the Shack, and the Eagle-Eye.

RAILROADS with terminals in New York have recently been calling attention to their records in maintaining greater safety of travel by rail. Since the first of the year the Lackawanna, the Erie, and the Pennsylvania have issued statements of this kind.

The Lackawanna's figures showed that it had not killed a passenger in ten years, though during that time it transported 193,787,224 persons. The Erie, with 2,171 miles of line and a trackage of 4,581 miles, showed a record of five years without a single fatality to one of its 125,000,000 passengers, while the Pennsylvania's statement showed

a clean bill of health for 1908, and the latest annual report of the Lehigh Valley proves that 4,876,801 of its passengers were transported without a fatality.

During three years, from 1906 to 1908 inclusive, 316 companies, operating 124,150 miles of road, did not kill a passenger. In 1909, 340 roads operating 153,000 miles of road also kept their records clean. In gathering figures concerning railroad accidents in this country, statisticians are accustomed, argue the railroad men, to include tramps, trespassers, and other persons who are killed while not actually traveling by rail. Often they compare this list of total fatalities with the fatalities occurring only to passengers on European roads. From such a comparison,

the American record does not appear nearly so good as it really is.

As an illustration of the confusion that may result from this method, more than 5,000 trespassers lost their lives on railroads in the United States last year. A great proportion of these were tramps who were stealing rides on the tracks or roofs of the cars. On one line about 9,000 trespassers were arrested in that time, and convictions were obtained in seventy-five per cent of the cases.

The Interstate Commerce Commission gives the following figures on the increased safety of railroad operation:

"From 1888 to 1897, the fatalities were 1 in 45,900,000; from 1897 to the present time the fatalities were 1 in 54,900,000; a gain in the safety ratio of over twenty per cent."

The annual report of the Bureau of American Railway News and Statistics says:

A Record-Breaking Year.

"Never before in the history of railways has such a record for comparative safety been made as that recorded of American railways during the year ended June 30, 1909. Of the 368 companies reporting to this bureau no less than 347, operating 150,657 miles of line and carrying 570,617,563 passengers, went through the year without a single fatality to a passenger in a train accident.

"Of the remaining twenty-one companies no less than ten, operating 27,681 miles and carrying 185,447,507 passengers, only missed such perfect immunity by a single fatality each. This leaves eleven roads whose misfortune it was to bear the burden of fatal accidents to passengers during the year."

The roll of immunity includes roads in every section of the union, from Maine to California, several great systems operating over 7,000 miles of line each, as well as numbers of little branch lines with less than ten miles of single track; lines operated with all the safety appliances known to twentieth-century progress, and lines working under as primitive conditions as prevailed on this continent more than half a century ago.

This record of complete immunity holds good over a total of 159,657 miles of track, which represents a mileage nearly seven times that of all British railroads, and equals the aggregate of all Europe, excluding Russia, but including the British Isles.

What immunity to fatalities to passengers over such a vast mileage means, may be partly realized from the fact that only twice in half a century has such a condition occurred

on the 23,000 miles of British railways, and never, to the writer's knowledge, so far as statistics reveal, on the railways of any of the great nations of Europe.

Fewer Passengers Injured.

It would take seven consecutive years of immunity from fatalities to passengers in train accidents on British railways to equal this phenomenal record of American roads.

In presenting similar returns for 1908 at that time it was said that considering the myriad units of risk involved, the record for immunity from fatal accidents to passengers is without parallel in the history of railway operation.

How that record has been not only equalled but surpassed is shown in the following statement for the last two years:

	1909.	1908.
Number of companies	347	316
Mileage.	159,657	124,050
Passengers carried		
one mile.	18,935,025,000	14,776,468,000
Passengers killed in		
train accidents . . .	None	None
Passengers injured in		
train accidents . . .	2,585	2,695

The figures given above, enumerating passengers injured in train accidents, are equally illuminating as to the safety of American railways, for they demonstrate that with the multiplication of risks in 1909 the number of injured was less by 4 per cent. The fact that no passenger is killed in train accidents is more or less adventitious, but a reduction in the number injured testifies to a reduction in the opportunities for fatalities.

Poorer Records Abroad.

During the last ten years the average of passengers injured in train accidents on British railroads has been 580, which considering the difference in the units of risk is 100 per cent higher than the above record for 159,657 miles of American railway in 1909. The following table, which includes no less than six great systems of over 2,000 miles each, presents similar data in respect to the ten roads whose record for safety to passengers in train accidents is marred only by a single fatality:

Number of companies.	10
Mileage.	27,681
Passengers carried one mile.	5,778,621,000
Passengers killed in train accidents. . .	10
Passengers injured in train accidents. .	778

These figures show a trackage of 4,481 miles greater than all the railways of the United Kingdom, approximately one-half the passenger mileage, and over three times the ton mileage, with only ten passengers killed in train accidents, to an average of twenty on British railways during the last ten years.

Further analysis of the returns to the bureau, since data along this line have been compiled, affords the following statement of the number of roads and their mileage that have records of entire immunity from fatalities to passengers in train accidents of from one up to six years:

	Number of Companies.	Miles of Line.
Six years, 1904 to 1909.....	17	9,641
Five years, 1905 to 1909....	95	44,894
Four years, 1906 to 1909....	177	57,331
Three years, 1907 to 1909....	228	69,713
Two years, 1908 to 1909....	287	108,710
One year, 1909.....	347	159,657

Long Periods of Immunity.

Gratifying and remarkable as was the immunity from fatalities of the class under consideration in 1902, the fact that for a period of five years ninety-five American roads, with a mileage practically double that of all British railways, have carried hundreds of millions of passengers without a fatality to one of them, is so at variance with the popular impression regarding the dangers of American railway travel as to seem little short of marvelous.

The impressive character of this showing will be better appreciated when it is understood that the immunity from fatalities in train accidents represents a number of consecutive years, counting back from 1909. No road has been admitted to the list where immunity has been interrupted by a single accident. With this fact in mind, the clean slate of the seventeen roads for six years challenges admiration, especially, as the bureau's reports in 1904 covered less than two-fifths of the operated mileage of the United States.

It is estimated that the railroads of the United States carried an average of 750,000,000 people per year for the last ten years, and in a single year they hauled one and one-half billion tons of freight within the limits of this country. If these figures can be taken as an index to the commercial importance of our country, we can believe that we are truly an industrial people.

While traffic has been growing during the last ten years, so have the railroads' equip-

ments. Thousands of miles of track have been added, and there is no comparison in the growth of the block-signal system and the telephone service on the roads during this period with that of the preceding decade.

The size and power of the locomotives have practically doubled since 1900, and the capacity of the rolling-stock has also shown a remarkable growth. It is estimated that the roads now employ one and one-half million men and women, to whom they pay annually about one billion dollars in salaries.

As to the other features of our industrial body, the manufacturing interests have shown about the same proportionate growth in the same time, and the agricultural science has made as great progress, but with not as great an increase in the volume of products grown. No doubt the latter fact is one of the causes of high prices. Many other industries in the country, however, have expanded in the same proportion during the past ten years that transportation systems have.

Figures just compiled by the Pennsylvania Railroad system show that in 1908 and 1909 its various lines carried a total of 299,762,658 passengers on its 24,000 miles of track, and only one passenger was killed as a result of a train-wreck. In other words, the chance of a passenger losing in an accident on the Pennsylvania Railroad system was one out of about 300,000,000.

The Pennsylvania's Safety Records.

In 1909 the number of passengers carried by the Pennsylvania Railroad system was 158,067,115. This was an increase of 11.55 per cent over the 141,695,543 carried in 1908. The number of passengers carried one mile on the Pennsylvania system in 1908 and 1909 was 7,170,568,517, so that for each mile traveled over that system the chance of a traveler being killed was one in more than seven billion.

One passenger was killed as a result of a train-wreck in 1909, while none was killed in 1908. In the two years 370 passengers were injured in train-wrecks. There were two less passenger collisions and fifteen fewer freight collisions in 1909 than in 1908, while the number of freight derailments was smaller by sixty-nine.

The passenger-trains on the Pennsylvania system in the past two years have traveled 118,407,318 miles. In other words, if one train had gone this distance, it would have made about 5,000,000 trips around the world,

and with but one death resulting from a train accident. The freight-trains operated by the Pennsylvania system in the two years traveled approximately 125,000,000 miles.

The Pennsylvania lines west of Pittsburgh have carried 52,518,808 passengers in 1908 and 1909. These passengers have traveled a total of 30,307,365 miles, and not a single one killed in a train accident. The Grand Rapids and Indiana Railway has a record equally as good, as in the two years it carried 5,104,585 passengers a distance of 2,966,870 miles, and none were killed.

Other Roads that Fared Well.

The Cumberland Valley Railroad, another subsidiary of the Pennsylvania, had a train mileage of 1,344,940 miles in 1908 and 1909, carrying 3,395,266 passengers. The number of passengers carried one mile was 61,492,767. This road enjoys the distinction of having no passengers either killed or injured on account of train accidents. No employees

were killed, and only one was injured in a wreck during these two years.

Passenger traffic on the Long Island Railroad is exceedingly heavy, owing to its large suburban traffic out of New York City. This road carried 50,709,597 passengers in 1908 and 1909, but no passenger or employee was killed in a train wreck.

The Vandalia Railroad operated its passenger-trains 5,017,415 miles in 1908 and 1909. The number of passengers carried one mile was 213,720,972, and not one was killed in an accident.

The Maryland, Delaware and Virginia Railway, and the Baltimore, Chesapeake and Atlantic Railway, two of the Pennsylvania's subsidiaries operating steamboats on Chesapeake Bay and railways on the Delaware-Maryland Peninsula, in the two years hauled 819,987 passengers, and not one was killed as a result of a train accident. No employees have been killed in this way, and no passengers have been injured. Only one employee was injured as a result of a train accident.

MOVING RAILS WITH MAGNETS.

New Methods of Loading and Unloading Iron and Steel Cargoes That Is Fast Becoming Popular.

THE noteworthy results attained by the use of lifting-magnets wherever large masses of iron must be handled quickly and readily are described in an article by H. G. Barrington in *The American Exporter*. It shows how greatly this use has extended of late and gives an idea of the enormous size of the masses handled by these great electro-magnets. Says the writer:

"For loading and unloading rails, tubes, and large plates, it has been found an advantage to operate the magnets in pairs. In this manner twenty to twenty-five rails at a time may be lifted while nested together and dropped in the exact location desired without disturbing their arrangement, enabling a whole car of rails to be loaded neatly in a few minutes.

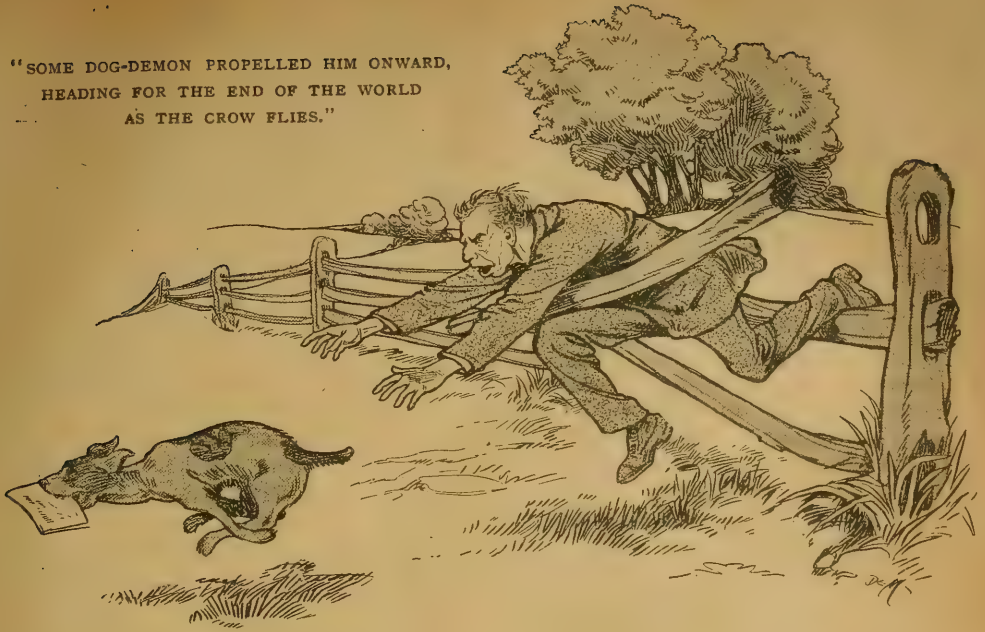
"It is in such special uses of the lifting-magnet that the saving of time and labor is most marked. The grip by simple magnetic force, by saving space occupied by the old hooks and chains, enables the magnet to do work which is impossible to the old method, as, for example, the close and accurate piling of rails and structural steel without rehandling.

"The magnet may be used advantageously in loading and unloading large quantities of loose scrap, matted masses of scrap-iron, lathe chips,

and the like at a profit in the handling, whereas the labor cost under the old method would be prohibitive. The cost of handling iron and steel is from five to fifty cents per ton, according to the nature of the material. The use of lifting-magnets cuts down this cost about ninety per cent.

"Other interesting special uses are in handling iron and steel goods packed in cases and barrels—such as kegs of nails—notwithstanding the wood between the magnet and the metal to be lifted, an extra margin of electric power being provided to make up for the absence of direct contact between the magnet-poles and the load; in handling finished machinery, where injury would result from the contact of hooks and chains; in shipbuilding as a support for drills, riveters, and the like on the plates being machined, the magnet being made part of the tool and serving to hold the latter firmly against the plate during the operation; in salvage work, where the cargo in the wreck consists of machinery or other goods of iron or steel, and the current is too strong or the depth of water too great for divers to work on the bottom; in the work of breaking up old castings for remelting; for handling magnetic iron ore at the mines, and for extracting scrap-iron from gold ore before the latter goes into the crusher."

"SOME DOG-DEMON PROPELLED HIM ONWARD,
HEADING FOR THE END OF THE WORLD
AS THE CROW FLIES."



HOOP AND HIS HOBBIES.

BY B. A. KOBELT.

The Siamese Twins, Fun and Frolic, Have
Some "Pulls" That Do Not Materialize.

IF high aim and low luck were ever etched on a fair face, that face belonged to Luke Lomas, ex-signalman and prospective key-wizard. His bally bent to be with you in a frolic had made gaps in his career, bilked his ambition, and left him the endless material with which to widen your smile and dash your credulity.

When I tracked up with him he still aspired to the presidency of the road, but he had taken this for his motto:

"Every excess is a defect, and don't you forget it."

As we mulled on a truck at Jefferson Junction, with Old Sol doing business like an oven, he delivered that pill for the nineteenth time. It didn't cheer me. We were both due at new jobs in Sheboygan that evening, but we couldn't make it—not by the finest calculation nor the swiftest air-ship.

So we fought disgust and ennui with cigars and newspapers—which wouldn't work. Time hung round our necks like eternal millstones, and I longed for something to murder the tedium.

Some extra puckers in Luke's fair phiz set me wondering whether you could hit him for one of his personal Shezerades, or get hit by his edgewise-crazy bone for disturbing his mock siesta.

"Beautiful kibosh, all right! Soul-aviating sentiments for them as don't know otherwise!" he grumped behind a Sunday supplement. With a sudden, ripping noise it flopped on the breeze and sailed down the platform.

"Now, what's biffing you?" I asked, passing the cheer canteen with the open nozzle. "Is it the variegated past, or the blooming future?"

"Oh, these papers make me sick—plumb

weary of the paleozoic thoughts in the aviating era," he graveled. "Hobbies—what do they know about hobbies? Hobbies that lift the mind above the sordid groove of workaday worries. Oh, piffle! I've seen hobbies lift men out of their jobs pretty close to the booby hatch. My salad days were soured with such. For instance, there—"

He viewed the wicked flagon and rinsed down some of the blue that was due to our endless lay-over, and I patted his dorsal expanse to loosen up his vocabulary.

"For instance, there—" I reminded him.

"For instance, there were heines and hooligans who hobbled up the trouble tram to the blue terminus of dippy regret." Luke scraped his throat. "They hobbled until fate handled 'em. They hoped to hobby to the upper seats of the temple, but they hobbled into a hole. And Luke Lomas says they were ambitious, and Luke Lomas is a fun-tolerable man. 'Every excess is a defect,' but let the dead past, and so forth. - Am I getting plain?"

"Not yet, but soon," I said.

"Very well, then." Luke huffed some genial. "Now hold your whistle while I steam down the corridors of time to the epoch of wild oats and green hobbies and a sunny sock called Hoop. Imagine the same and yours spiefefully going the slow rural pace on the G. N., near the village of Bock, yanking levers in a high-glass observatory, hoisting orders on a hoop to the flying moguls, and banking up nothing or less.

"We were both ambitious, and our dinkey tower was the *château d'If*. During idle hours, gazing wishfully over an acre of cat-tails, we considered the niceness of the presidency, and the heftiness of getting there.

"We had notes on the rail-presidents from Vanderbilt to Early, and we could match the success-keys right and left. Talk about your talents buried in the wildwood! Why, for fancy gifts, Hoop had your gay Lotharios and Admirable Crichton poked back into shadowland. He could do a Merry Widow on a three-string and some Lar Neveu with a kodak; took to the mesmer like a horse to oats; could train a beagle for the acting zoo, etcetera, and then some.

"So, when trout-brooks play out in the autumn, he took a casual shine to a hobby—the plain, ordinary sort of keeping a diary and developing films, and he rid it so darn hard it left hoofprints on the sand of time and blue notes on my shoulder hock.

"How? How did this admirable harem-scarem do it? How did a camera film and

a page of mental deposits bear on my figured career and make me wait on a siding of nix-prosperity?

"Right there's the nut on which the fates swiveled. The nut was hobbies, and the mutt was Hoop, and 'every excess is a defect,' and don't you forget it when you're hit by ambition. Now, am I getting plain?"

"Plain as plunks at the English Derby. But keep up the pressure," I said.

"You see," Luke went on, "while Hoop had hobbies, he also had theories. One of them concerned how you can never reach the summit in the railroad game without a pull from the super. That's why he two-stepped over the landscape to that nine-piece town called Bock some more than was good for him, the objective-points being Jim O'Rourke, Sally Hames, Eddie Graney, and other lights of the rural rampage.

"Jimmy O'Rourke being the gay chinner, and first cousin to the superintendent of the division, Hoop discoursed loud and long on the possibility of his influence till we plum forgot that we be such stuff as dreams are made of, and realize that our little lives are yanked around by foolish bubbles.

"Hoop had a genius for drawing unto himself a lot of friends, near-friends, and nix-friends; and, speaking in epitome, he was the hub of the world at Bock. I was the axis of the job and the prop of the folly.

"'Back with the big blarney, but a little rose for Jimmy O'Rourke, and it's us for a chance with the big super,' he used to yoddle to himself, coming back from the gay doings where he was the only aeroplane in sight.

"Being always there with the prize wag and the brown kodak, he got the come-again sign from every corner, and, by and by, Jimmy had him booked to meet the super at a Cream Town stag-party. I figured that when the super had pulled Hoop, Hoop would pull me; but hang the fatal error and the hoodoo of the hobbies which, in a single night, humbled us to the brown earth that clings to the farm-trolleys. 'Every excess is a defect, and don't you forget it.' Am I getting plainer?"

"Sure," I said.

"You see, one night, as I stuck by the phone and the semaphore, Hoop came home from a quilting bee that had turned into a cider fête, and the funny fit got into his gizzard so bad that I thought he'd keel over in the trap-hole. He particularized on the funny side of a Frenchy event; and, by and by, I do mirth-jigs myself, and wind up with the fatal remark, 'Fine, superfine stuff for your diary!'

"Prompt as rockets, Hoop anchors up with his day-book and hen-tracks the following: Deacon White and Widow Bule have ascended from the vale of years to enjoy some spoony moments behind the rope portières. None of the nectar escapes. Love is an instinct that elevates the mind above the mundane. Miss Minnie Binnie, drawn by a smile from the only pebble, she proceeds in a blind hurry and leaves white kid pumps in the mundane fish salad. Eddie Graney, esquire, with Mamie Mingle's hair-puffs tangled on his cuff-links, gives similar signs of reciprocating love; after which the dear, good wife is the storm center, the sirens vamoise, and the fête is over for the rest of the day.

"Fine and dandy! You've got

"He dropped the film between the leaves of his diary, which he always carried in his outer coat-pocket.

"Now, Jimmy was booked to marry Sally Hames come Friday next, and we were both on the gala go-list. The rice was ready, and our toofins sharp for the spice-cake.

"But nix! Hobbies stalled the hymenial special. Fate rung the curtain down on the



"SHE RAGED AT THE FILM AND THEN TORE UP HER TROUSSEAU."

the literary lights squeezed into a tomb,' I said to Hoop, who was moist in his eye. Then he showed me a film containing two heads of opposite gender in ambrosial embrace and tender lip-meetings.

"Jimmy O'Rourke and Ella Braney!' I whistles. 'And Jimmy soon a happy benedict! By George and Janus!'

"The same,' laughs Hoop! 'They were sitting on a rock when I snapped the shutter; but not for a farm would I let Jim know it.

wedding and up on a biffing-match — and here's how the hobbies did it.

"The day before the ceremony Hoop hastened over to Bock as right-hand-help for Jimmy. In Pop Hames's parlor he leans back in a chair, and the diary dips out of his pocket. Sally gets her finger on it and hustles up to the boudoir. The film drops out, and Sally drops down.

"A outrage! A black outrage!' she raged at the film when Hoop was gone, and then she tore up her trousseau, scandalized

the minister, who, in turn, was scandalized by his name in the diary, and the whole town riz up and had a banshee musicale with spitfire interludes.

"Worse, and still worse. From all points of the compass they turned the sass-hose on Jimmy's character; and, when he saw the film and gets on to the ruction, he steams over to us to obliterate our nerve-force.

"What happens? Everything happens. The universe does a buck-and-wing, and Jimmy O'Rourke does the prize punt on our plexus.

"Hoop worked at night, and long about twelve a sudden skitter of glass and a high G squeal made my hair curl sideways. I swing out of bed and up the ladder, but a cowhide got ahead of me, and I took a dive through the ether. My shoulder-hock lit on a nice, five-cornered nigger-head, and the rest was green stars and catherine wheels.

"When I came to, Hoop groaned because he couldn't get at the levers, and I groaned back that I couldn't, being dead as a door nail. So the milk-van special went crashing to her near-doom, and our luck was spoiled forever. Talk about the hard blow to my amiable, animated alter ego, who figured on a pull from Jimmy's cousin! And talk about my mad! Was I to blame for the hoodoo of the hobbies? I was only a pal in wholesome fun. But, you see, 'every excess is a defect' in everything.

"Later on, Jimmy salvaged Hoop's teeth for fifty dollars, so nothing was lost save joss and honor and the right-of-path to the pay-car. The wayfaring license came the very next day, and it was us for the convalescent-ward, where the future seems grim like a lava stream on a buckeye landscape—and all due to the girlish habit of snapping pictures and taking notes on humanity.

"If Hoop had left hobbies alone, I might now be a G. N. train-shuffler. No, sir; none of them genteel disturbers of lazy equilibrium for mine! I could stand the laze in the kiosk of the Khedive without lighting a pipe. That is, if I wasn't ambitious."

"So that was the end of the hobbies?" I yawned.

"Not on your silverine smoke-holder," said Luke, gathering speed. "That was the beginning of the end. When we left the sick-house we stuck together like the Siamese twins; kicked baggage for a year at Janesville, and learned to manage the Morse. We were extras a month, and then carded up for Rockfield, on the C. and N. W., and vowed on our very first tissue we'd step firm

every day and get to the top. But did we? Ask Hoop by long-distance.

"You see, with only three day-and-night regulars, four water-takes, and a switch to handle, De Gustibus wasn't in it, and we weren't ringing down the grooves of change with adequate éclaw. Life grows as flat as a bottle of hock in the desert of Gobi. No field for ambition or superfluous ideās. We had no friends to dally with.

"Why? Chiefly because the fancy fringe of local habitations wasn't with us a bit. Rockfield was bounded on the west by a church, on the east by a graveyard, on the south by a crowd of snobs, who made you feel like the stub-end of a burnt-out stogie, and we didn't choose to get in on the north via the boozeries.

"Consequence: For a weary while we was the solemn fossils in the telegraphic cave, with our mettle in a state of coma. But you can't be a mull-head all the time, so the temperamental germs get busy again, and, once more, it's Hoop for the hobbies. I didn't second the motion, but I was always the jolly twin. This time, he idled away the cantankerous leisure with a mail-course from Professor Zarbray-Zinzi.

"Oh, chuck it! That mesmer dope's too deep for you," I kept kidding him. 'Devote yourself to the Encyclopedia Britannia and the universal problem of transportation, and don't go looking for troubles,' was part of my advice.

"But Hoop keeps right on with the patience of a nag at a lamp-post in the market quadrangle. By the fixed squint in his right-hand googoo, I knew he was wisening fast and certain.

"Now, when he wasn't reading the mystic dope, he was training a lop-eared, attenuated cross between a rat-cur and a blood-beagle. It was another of his hobbies. The dog was docile, and before long he would catch the papers that were flipped from the mail-cars and skip playfully away with our Sunday chapeau.

"One evening, a mysterious nob, with a rose in his lapel and a cane on his cuff, drops off a varnished special. He makes friends with the dog by twirling his cane. As we beam from the window he starts to chin.

"Boys," he says, 'I'm billed for a rest in the rural regions. It's me for the simple life in the lap of mother nature. "Laugh and grow fat," the M.D. tells me, but how the battling Nels this wart of a town can furnish humor after you've mirthed in little old New York, is a nut to me.'

"'Why, fellows, you wouldn't believe it,' he rattles on easy, with a twirl of his cane, 'but last week I scattered three thousand red ruddocks to a few old comedians who made me laugh as never before. I'm a crank on fun and wholesome folly. Laughter is my elixir.'

"We humored the nob, and watched him swing through the dusk with his cane. I also watched new ideas crawl around on Hoop's countenance. He said never a word, but smiled a plenty. I reckoned he forgot the Zarbray-Zinzi, but I reckoned wrong—all wrong.

"'What the busy bust-valves!' I exclaimed, one evening, seeing Carlie, the extra from Jackson, high up on a tip-tilted lawn-bench with a big chew of toilet-soap.

"Hoop feeds the frolic with occult passes, and Carlie is wax to the will of the mystic. He acrobats out on top of a box car, where he goes through a clog-dance, and winds up with an airy Adelaide Genee that gives you the marvels.

"'See here, I won't be your free-show spinning-top,' he blubs, coming back to normal. But Hoop only chuckles, and with one snap of his finger laid him out in dreamy psychosis again. This time he was the daring Carrie Nation, in a trail-skirt, brewing trouble in the boozeries. As he chopped the beer-stained air with the dream-hatchet, my vitals went up and down like a corn-hopper, and, while Hoop kept up the séance and I the tomfool convulsions of the mirth-organs, the temperamental bee got busy again.

"'Say, let's over and humor the nabob,' Hoop whoops all at once. 'He's a big It on the Pennsy. Rub him right, and it's us for a boost. Say, we'll give this little snob-nest a joy-fest to insert in the village annals,' he squeaked, with joy and waving arms. Carlie was game in two flips of the occult. 'Yours ambitiously follows suit with presentiments.

"'Now, Carlie,' says Hoop, with the downward passes, 'you're a nice, nifty feminine in a hobble-skirt. You're inspired to uplift humanity in the high cause of equal suffrage, and rally this dead community to that live and up-to-date game. There's the Widow Duncan's *peau de soie* what-yer-call-it airing on the line, and, as soon as you have donned those intricate habiliments of the intricate sex, you can do a lingual marathon that will irrigate humanity with new emotions. Now scat, and distinguish yourself on the village plaza.'

"Did Carlie do it? You bet your last ducat. He streaked down the street like a

collie off his chain. When we caught up with him he was half in and half out of a gray umpire creation of the Renaissance pattern, his fists punctuating powerful speech before a little group that was bursting with joy and drawing others like a store-fire. Then Hoop urged him on to the garden of the nabob. We stopped beneath the evergreens near the nabob's open-air bedroom.

"'Yes, siree, don't you be doubting,' Carlie yells. 'Women are the headlight of progress guiding man on safe tracks! They are the drive-wheels of civilization! They are everything that counts on the track to success and universal enlightenment. I say unto you non-believers that without the electrical impetus of woman, man would be like a battered empty on a crooked tram!

"'Woman,' the nob bumps up with sudden thunder, 'is an engine of mischief—a baggage of whims—a air-valve of gossip!'

"We wonder and whisper. I tootled up to him that Carlie was in a deep psychological state superinduced by suggestion.

"'Superinduced by gin-swigs,' I heard him snort.

"'If woman can do all this, what can't she do in the realm of politics?' Carlie spills on in the moonlight. 'What can't she do for the gubernatorial festers?'

"'Tie it up. Tie it up and skedaddle,' the nob yells out in anger. 'Get out of my yard, you double darn hayseeds! Let a sick man sleep and follow prescriptions!' He rises with purple passion and whacks the air with a hickory stick.

"'By gash! Don't I know the feminine gender. Haven't I seen? Don't I know! Hike, I say! Hike!'

"The same instant, there's a gap in the crowd, a scared holler, and the widow in a faint on the flower-bed. Next, the crowd on the rampage and the air blue with words. Hoop threw off the influence quick as scat, and wheeled round with a helping hand. 'Never mind, Mrs. Duncan,' he mollifies, 'we'll salvage your dress for fifteen dollars. Better be calm and forget.'

"'Fifteen dollars!' the widow gasps. 'Fifteen dollars for a *haute monde* creation fresh from Paris! Oh, dear! oh, my!' and then gives a nervous exhibition that calls for the padded gig and the gifted pill-mongers.

"The hoodoo of the hobbies was on us again. The nob was mercury and the widow was worse. The whole town rose up like one man, rallied to the widow's gown and the nob's dyspepsia, and heaped coals of fire on us men of mystery. Hoop couldn't see why

the Captain Jinks he wasn't wiser. He might have known the widow would miss her dress.

"Well, the dumfounded Charlie took off his hobble-skirt, and that was the end of the séance, but not the end of our woes. We stubbed home some crestfallen, and viewed the situation from the dark-blue angle. Hoop himself began to cuss the hobbies. 'Pulls' are nit unless you earn them. 'Excess is defect' in everything.

"When we reached the office, the sounder was giving the hurry-up signal. Hoop stooped to the key, and I picked up the orders for 24. Just then Chuffy came yipping his welcome. In his canine zeal, he snapped up the orders, bounced out, and streaked up the right-of-way. "I started after him—up and down hill in the moonlight.

"Do you think that dog would stop? No, sir! Not the fraction of a second. Some dog-demon propelled him onward, heading

for the end of the world as the crow flies. I quit heading when I reached a fence, and footed back—cussing hobbies all the way.

"As neither recalled the orders exact, and 24 was tooting, Hoop signaled the chief and mentioned the quandary. To keep our honor right side up, he blamed the dog pretty often, but the chief cut in with a slam that frizzled our hair. Having sent the duplicates, he said no more, but we knew we were double-headed by crazy luck—the chief on one side, the nob and the widow on the other.

"Sure enough, next day it was us for the

"GET OUT OF MY YARD! LET
A SICK MAN SLEEP."



long trail and the old hardships. When I packed my grip, my boiler was busting, and I blew off steam on hobbies and theories. I proved to Hoop how hobbies are Jonahs, and charged him to remember that 'every excess is a defect,' and the only pull worth while is the pull of energy.

"Correct you be," Hoop says at the end of the homily, 'so we better sever our connection for a year at least, and be the Siamese twins no longer.'

"That's how Hoop is Professor Zirla, the mystic wonder, and yours spielfully a rolling-stone on the C. and N. W.

"Ah, there's our train at last. Yep, we will roll into jobs without fail to-morrow morning."

"Luke, we shall roll up-grade to the high hummocks of power and pay," I cheerfully said. And then I patted his back for having murdered the tedium, and swung my grip near the slowing train."

FROM THE BOOK OF RULES.

A Railroad Man's Catechism with Answers to Questions Based on the Cruel Unembellished Truth for the Edification of the Unsophisticated Acolytes of the Rail.

Q. What is a book of rules? **A.** A book preserved in the trainmaster's office under lock and key.

Q. What is standard time? **A.** The time that always comes in the middle of a train order.

Q. What is a wire chief? **A.** The man who waits until the despatcher is busy and then takes the wire.

Q. What is a trainmaster's clerk? **A.** The man who collects cigars from the boomer brakeman and hands out the examination books.

Q. What is a railway commission? **A.** A body of men appointed by the State to instruct railway officials as to the proper method of conducting their business, how to make reports, etc.

Q. How much railway experience are they required to have? **A.** None.

Q. What is a grievance committee? **A.** A body of worthy and well qualified technologists whose duty it is to interpret ambiguous reports of agreement for the edification of the general manager and the benefit of the service.

Q. What is a car inspector? **A.** The bane of the yard-master's existence. He tests the air and is guaranteed under the pure food law never to move fast enough to raise a sweat.

Q. Do train and enginemen assist the despatcher in getting trains over the road when close to the sixteen-hour limit? **A.** They did once, but the despatcher dropped dead. Since then the practise has been discontinued.

Q. What is an operator? **A.** A graduate from a ham foundry plucked before he is ripe.

Q. How does he improve? **A.** None; he gets worse.

Q. What is a switchman? **A.** A man employed for the purpose of switching cars and providing steady employment for the car inspectors, and such other duties as may be assigned to him. He eats coil springs and bar iron for luncheon.

Q. Does he permit cars to strike each other vio-

lently? **A.** Yes, excepting in investigations to fix blame for breakage, when they strike only hard enough to tell it; just enough to crack a flea.

Q. What is a switch shanty? **A.** A room or place representing the general manager's office, a place where switchmen meet for work and to get out time-tables, to change the management, rearrange train schedules, and such other business as may regularly come before them.

Q. Why do enginemen receive copies of train orders? **A.** So they will know what engines they have.

Q. What is a brakeman? **A.** A hot-box cooler and a draw-bar lugger, and a Jo Dandy among the ladies.

Q. What is a wreck? **A.** Mentally, a man who has tried to follow the book of rules. Physically, a man who has been in constant service for twenty years.

Q. What is a signal? **A.** The act of drawing your right hand across the throat and pointing your thumb backward over your right shoulder, which signifies that the superintendent or trainmaster is on the rear end or on a train following.

Q. What are the duties of an engineer? **A.** To look wise, even if he isn't; to tantalize his fireman and save valve oil.

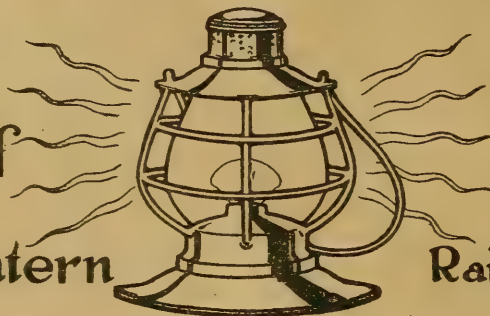
Q. What is a fireman? **A.** A man of backbone and sinew, which he has acquired by permitting brakemen to do his work. A man who is an expert at flirting at long distance, but who is harmless otherwise.

Q. What is a fixed signal? **A.** A student brakeman three cars from the engine, lamp out, and a cinder in his eye.

Q. What is a yard? **A.** A heterogeneous conglomeration of tracks within defined limits, inhabited by a bunch of savages called "snakes," whose duty is to leisurely perambulate through the yards and set out "bad orders" as fast as they make them.—*Northwestern Bulletin.*

WHAT'S THE ANSWER ?

By the
Light of
the Lantern



Questions
Answered
for
Railroad Men

ASK US!

WE like to be as useful to our readers as we can; but, because of the great popularity of this department, we are forced to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature only. Letters concerning positions **WILL NOT** be answered in this department. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials.

IN setting the valves on an outside admission, indirect engine, the marks on the valve-stem showed 1-8-inch lead on the front end, and line and line on the back end. This blade needs to be shortened, and, supposing the rocker arms to be the same length, if we shortened the blade 1-16-inch would not this change equalize the travel at both ends?

(2) In the above illustration, I do not understand why you would shorten the blade just one half the amount to affect the valve. Suppose, for instance, you wanted to push the valve ahead 1-16-inch, why is the blade changed only one half this, or 1-32-inch? If you push the lower arm ahead 1-16-inch, does not this pull the valve back the same amount?

(3) Explain the laying off of a new reverse lever quadrant.

(4) How is angularity of eccentric-rods and main-rods overcome with the Stephenson link motion and the Walschaert valve-gear?

(5) How are driving-axes quartered; how much larger are they turned than the wheel, and what are the pressures to force them in?

(6) How are smoke-stacks laid off to have them in perfect line with the exhaust tip?—T. J. M., Havre, Montana.

(1) Provided that the throw of the eccentric is equal to the travel of the valve; in other words, that the top and bottom rocker arms are of equal length, the alteration of the eccentric-blade wants always to be one-half the dimension shown on the

stem. To make it simpler: in the case which you quote you have 1-8-inch in front, and nothing, or line and line, in the back. Hence, if you shorten the blade 1-16-inch you move the valve ahead that distance, reducing the front lead to one half 1-8-inch, or 1-16-inch, and from line and line, in the back, to an opening of 1-16-inch; thus equalizing the lead at each end.

(2) As above explained, in all cases where the two rocker arms are the same length the valve is affected equally with whatever change is made to the eccentric-blade. In cases where the rocker arms are of different lengths, which is not uncommon, a calculation in which simple proportion, or the "rule of three," may be employed to arrive at the exact amount of the change. If such a design existed where the top arm was twice as long as the lower the valve would move twice what the blade was shortened, and *vice versa*. When they are of unequal lengths, however, the difference is slight, and experienced valve-setters have little difficulty in reckoning with it, in making readjustments of the blades.

(3) The prevailing practise years ago was to arrange the notches so that the steam would cut off at some full number of inches of the stroke with the reverse lever in each one of the notches. They were then located so that the cut-off would occur at 6, 9, 12, 15, 18, and 21 inches, or at 6, 8, 10, 12, 15, 18, and 21 inches of the stroke.

All recent practise—in fact, for the past twenty years—provides for as many notches as there is room for in the quadrant. This is much the best plan, as it gives more graduations in which the valve-gear can be worked, and it is a matter of no consequence in the working of an engine whether the steam is cut off at some full or fractional number of inches.

In a new engine the quadrant is generally placed at the point designated for it, with the reverse lever temporarily attached; and by means of a temporary reach-rod, or a blank end on the reach-rod, which may be clamped to the lever, the middle notch and the extreme end notches are located and laid off. The remainder of the work is simply to add the remaining notches, and the first quadrant can then serve as a template for all subsequent quadrants embodied in the order for the locomotives, provided that they are of exactly similar class.

(4) If we would attempt the consideration of this particular question in the detail which it deserves, its ramifications would absorb the entire space allotted to the Lantern Department. All we can say at this writing, and in this space, is that whatever distortion of the motion is produced by the angularity of either the main connecting-rod or the eccentric-rods is compensated for by offsetting the saddle-pin of the link from the true center line of the link radius. It is fully appreciated in this writing that if you do not know what the above is intended to imply the answer is negative, but the reasons for the brevity have been given. It is a matter of great interest. In this number of THE RAILROAD MAN'S MAGAZINE, Robert H. Rogers explains the details of the Stephenson link as the Walschaert gear fully, completely, and simply.

(5) This is usually done in what is called a quartering machine. It is merely the solution of a right angle, and could be as readily performed through the instrumentality of a spirit level on one side and a plumb-bob on the other. The turning is practically the same size as the fit, and the pressure is determined by the diameter and material of the wheel.

(6) The majority of smokestacks, if not all of them, are attached to a smokestack base or saddle, and it merely remains to fit this latter in its proper position on the smoke-arch. This can be done either by running a plumb-bob to the center of the exhaust orifice and chipping the saddle to coincide with the plumb line thereof; or, as is done in many of the locomotive works, by using an adjustable gage which fits into the blast orifice and from which a perpendicular is erected from which the interior diameter of the stack and saddle can be calipered and set.

J. R. R., Jennings, Louisiana.—We would be greatly pleased if you would submit the interesting questions embodied in your letter in a more lucid form, free from contradictory or impossible situations. There are few problems, that is, from an engineering standpoint, that mathematics or the formulas emanating from mechanical engi-

neering cannot solve, but in order to arrive at such results a tangible basis must be given on which to work.

J. R. G., Mesa, Arizona.—Please note replies to "H. E.," in the July number, and "B. M.," in the October number. These curves are all arcs of circles, and their actual laying out can be much better explained to you by some engineer in your own territory than in labored and lengthy explanation through this medium.

IS there such a thing as a standard thread for bolts and screws? If so, what is it and when did it become standard?—M. A. Y., Boston.

Until about 1885, the most common form of thread was what is called the "V" thread. It was made sharp at both the top and bottom. The shape of the thread was almost identical with that of the capital letter which we have offered in illustration. It is evident that if such a thread for one screw is made pointed, and that for another is blunt, that the nut for the one will not fit the other accurately, and also that if a nut have eight threads to the inch it will not fit a bolt with nine threads.

Owing to the fact that for a long time no common standard had been agreed upon for the form, proportions, or pitch of screws, there was a very great diversity in these respects in the screws which had been used in the construction of locomotives and other machinery. In 1864, the inconvenience and confusion from this cause became so great that it attracted the attention of the Franklin Institute, of Philadelphia, and a committee was appointed by that association to investigate and report on the subject. That committee recommended the adoption of the Sellers system of screw-threads and bolts, which was devised by William Sellers, of Philadelphia.

This same system was subsequently adopted by both the Army and Navy Departments of the United States, as standard, and then by the master mechanics' and master car builders' associations, so that it may now be regarded, and, in fact, is known as the United States standard, but the design is due to Mr. Sellers and the system should be designated by his name.

C. G. E., San Francisco.—(1) Such a book as you mention—dealing with the respective duties of men composing a freight-train crew—has never come under our observation. In all probability it is yet unpublished. The work of conductors, flagmen, and brakemen is defined in the general book of rules issued by each railroad. The subject is scarcely of sufficient extent to warrant presentation in separate book form.

(2) Since you have located the poem wanted in a past number of the *Brotherhood of Locomotive Firemen and Enginemen's Magazine*, your shortest cut to it would be by addressing that publication at

Indianapolis, Indiana. It might be possible that they can supply you with the number containing this poem, although, as a rule, it is difficult to secure past issues after such a long time as five years.



C. E. O., New Jersey.—*The Railroad Age-Gazette*, New York or Chicago, would be the best medium to address in regard to new roads or new construction in general. We are in doubt whether your letter means main or trunk line electrification, at present operated under steam, or simply new trolley lines. We have no statistics whatever in regard to the latter, and, with the exception of the Pennsylvania's new terminal arrangements in New York, do not believe that any electrification on a large scale is contemplated.



A. E. A., Farmington, Maine.—The form in which you submit the two train orders are not in accordance with the standard code. We do not think that any despatcher would issue them. From the form quoted, however, it would appear that "B" is right in both contentions, but the proper procedure would be to go to some train-despatcher on the Boston and Maine Railroad, which is in your territory, and ask his opinion of such orders. You will generally find these gentlemen quite willing to oblige as they are always interested in problems which pertain to their business.



A. O., Akron, Ohio.—The complete history of the locomotive as you would like to have it, and as we would like to read it, seems to remain unpublished as yet, although there have been isolated cases where an attempt has been made at such portrayal within the covers of a single volume. Past numbers of *THE RAILROAD MAN'S MAGAZINE* have pretty fully described progressive locomotive development in this country, and sufficiently, it may be said, to fully meet your requirements. In addition to this, you might secure further information by addressing *Railway and Locomotive Engineering*, New York City, New York. This latter journal has gone deeply into locomotive evolution, but we cannot say that they have this information in compiled form.



WHAT causes the falling of the crown-sheet of a locomotive while under steam?—F. G. T.

The usual cause for the dropping of a crown-sheet with the boiler under steam, is low water arising from inattention on the part of the engineer or operator. The crown-sheet is supported from the top shell of the boiler by means of several hundred crown stays or crown bolts. These are protected from the action of the heat by the water in the boiler, which should be at least five inches deep on the crown-sheet.

Should the water level be allowed to drop or to leave the sheet altogether, the crown-bolt heads and

crown-bolt bodies no longer have this protection. They become softened by the intense heat of the fire. Should conditions be sufficiently extreme the pressure in the boiler is sufficient to force the crown-sheet down and away from the softened bolts mentioned.

At rare intervals, other causes than low water are indicated for a crown-sheet failure, for instance, unsuspected defective boiler conditions through the crown stays or braces being broken. This, are indicated for a crown-sheet failure, for instance, and is not likely to materialize. Low water is the usual cause.



T. W. L., New York.—About the best medium through which the information which you desire can be secured is the Railway Equipment and Publication Company, 24 Park Place, New York City, New York. Enclose one dollar for the current number of their "pocket list." Except in the State of New York, where all railroads must report to the Public Service Commission, statistics are not available concerning trains late or on time, hence we have no reliable figures.



Y. P. V., Soledad, California.—The principal transcontinental lines are the Union Pacific; Southern Pacific; Atchison, Topeka, and Santa Fe; Northern Pacific; Great Northern, and Canadian Pacific. It is impossible to give here the date of completion, when opened for traffic, etc., which your letter requests. If you will consult past numbers of *THE RAILROAD MAN'S MAGAZINE*, the history of all of these gigantic enterprises will be found related at length. Any or all of these may be secured by addressing the Frank A. Munsey Company, 175 Fifth Avenue, New York City, New York.



H. N. C., U. S. S. Iowa.—(1) The main line of the Atchison, Topeka, and Santa Fe extends from Chicago to San Francisco, 2,576 miles. The Los Angeles, California, service diverges at Barstow, California, 2,123 miles from Chicago, and the total distance from Chicago to Los Angeles, via Barstow, is 2,265 miles. This, of course, is merely the straight main line, about which you desired information.

It is far from representing the total mileage of the Santa Fe, which, with its controlled lines, amounts to, approximately, 9,112 miles.

(2) Engine changes on the main line of this road, from whatever information we can secure, are at Fort Madison, Iowa; Marceline, Missouri; Kansas City, Missouri; Topeka, Kansas; Newton, Kansas; Dodge City, Kansas; La Junta, Colorado; Trinidad, Colorado; Las Vegas, New Mexico; Albuquerque, New Mexico; Gallup, New Mexico; Winslow, Arizona; Seligman, Arizona; and at the following places in California: Needles, Barstow, Bakersfield, Fresno, and Stockton. This is not offered with the claim of absolute accuracy, but at least it represents the principal engine changes, and should be practically correct.

(3) W. F. Buck is superintendent of motive power. Address Railway Exchange Building, Chicago, Illinois.

(4) Oil is used extensively for fuel on the lines west of Albuquerque, New Mexico.

(5) We cannot quote the exact wage schedule paid engineers on this road as we have never had access to the agreement. This would also vary with the character of the service, and without definite information it would be foolish to hazard a guess, and unfair, possibly, as well.

TR., Canton, Ohio.—There is no regular business in this country of photographing locomotives, although several firms in England do prosecute it, and over there it is quite easy to secure at small expense a picture of almost any type of engine running in the British Isles. In this country, the large locomotive works, such as Baldwin's and the American Locomotive Company, usually have this work done by contract with some local photographer. While a picture is always made of one of an order of locomotives, these are only furnished to the owners or to those directly interested. All other applicants for photos are usually charged an amount sufficient to cover the cost of the picture. These locomotive building firms can place you in the way of getting photos, but a moment's reflection will convince that it would be scarcely consistent for them to furnish them free of cost.

R.H., Waukegan, Illinois.—The deformation of track, ascribed to the effect of the sun's rays, is the most extreme case of which we have ever heard. It does not seem that this could have been the true cause. The effect of heat on rails, especially in this country, is scarcely sufficient, even under practically abnormal conditions, to cause any appreciable change in the true alinement of the gage. It could not have been the cause of the peculiar curvature which is described in your letter.

WHAT is the standard pay for engineers, firemen, and conductors on railroads in England?—J. W., Jacksonville, Texas.

The writer is almost ashamed to answer this question, in view of his intimate personal knowledge and high regard for the ability and qualifications of the British railroad man. But the truth may as well be said, and probably can be better made manifest through reference to a representative run in the British Isles. We will select, for instance, the celebrated 10 A.M. London train out of Glasgow (central), which service is maintained jointly by the Caledonian and the London and Northwestern railways.

The section operated by the Caledonian extends from Glasgow, Scotland, to Carlisle, about 103 miles, after which the train is operated by the other road mentioned. There are no stops between Glasgow and Carlisle, with the possible exception of Motherwell on flag. The train consists of some

eleven carriages, a total weight behind the engine of some 375 tons. On arrival at Carlisle, this engine and crew returns to Glasgow on a similar non-stop run, arriving about 10 P.M., or twelve hours from the time of departure.

Now, you want to know how much the engine crew will receive for this 206 miles round trip, and, while we blush to tell you, all the engineer receives is eight shillings, or \$1.92 for the round trip, and the magnificent compensation of his fireman is four shillings and sixpence, or \$1.08!

When it is remembered that a similar run of 206 miles in the United States would mean about \$8 for the engineer and \$5 for the fireman, it can be well appreciated how undervalued the services of these men are in the old country. It is wrong, too, because it is just as hard to haul or fire a train there as it is here. The same conditions must be confronted and there is the same liability of the unexpected.

Generally speaking, on English railways the wages of the locomotive engineers fluctuate from \$7.30 to \$14.60 per week, the average wage being \$9.73. The firemen receive less than \$7.30, the lowest sum given to engineers. Seven-eighths of the passenger conductors, or guards, draw from \$4.84 to \$7.30 per week.

It is from an intimate knowledge of all these matters that the Lantern Department has steadfastly discouraged any and all aspirations which its readers may have had to embark in railroading in foreign lands. In no country on which the sun shines is a railroad man better treated than in the United States. From what has been said above, it is far better to make hay at home than to haul a fast train abroad for a fireman's pay, and merely for the sake of novelty.

H.A. C., New York.—The principal division points where superintendents are located on the Union Pacific in Colorado and Nebraska, are Denver and Omaha, respectively.

(2) On the Chicago, Burlington, and Quincy division superintendents are located at Lincoln, Omaha, McCook, and Wymore, Nebraska, and at Sterling, Colorado.

(3) The Atchison, Topeka, and Santa Fe has superintendents located at Pueblo and La Junta, Colorado.

L.G. R., Pineville, Louisiana.—You need not wipe engines on any railroad before you start in firing. This has been explained many times in this and other departments of the magazine. It was suggested some three years ago in an article which appeared in the Self-Help Department, that in the instance of an applicant being somewhat under age it would be advisable to work around the roundhouse in the capacity of a wiper or helper until the proper time arrived to go on the road.

This, of course, was simply with the end in view to secure familiarity with the business through its atmosphere, and was not by any means intended to imply that such a course is mandatory. After

an extensive review, we can't find any road where previous service in some other capacity must prevail, although it is a fact that many master mechanics are in favor of such procedure.

We cannot tell you where a rule book of the Chicago, Rock Island, and Pacific Railroad can be procured, because these must be receipted for by the employee to whom issued, and must be returned to the company at the expiration of the term of service. There is no master mechanic at Eunice, Louisiana, on the above road.

AT what speed and distance would an engine have to be run to fill the tank?

(2) How and where is the dipper placed which fills the tank?

(3) Does the fireman or the engineer operate the dipper?—S. A. M., Eachville, Arkansas.

(1) The speed is usually reduced to about thirty-five miles an hour over the track troughs, otherwise the impact of the water in the scoop would cause the water to rush violently out of the tender-tank manhole and over the roof of the cars. The tank should be filled in one-quarter of a mile, if proper and common sense precautions are observed.

(2) What you term the "dipper" is technically known as the water scoop, and may be defined as a device for putting water in a locomotive tender, while in motion, from a trough laid between the rails, sometimes called a track-tank. It consists of a cast iron or steel-plate conduit of rectangular cross section, about 8 x 12 inches, passing up through the tender-tank and turned over at the top so as to discharge the water downward. The lower end, underneath the tender frame, is fitted with a scoop or dipper, which can be lowered into the track trough by a lever worked by hand or by compressed air applied in a cylinder whose piston-rod is connected to the mechanism for raising and lowering the scoop. Owing to its inertia, the water is forced up through the siphon-pipe into the tender tank when the scoop moves through the trough, at a speed of from twenty-five to forty miles an hour.

(3) By the fireman, who lowers and raises the scoop on receipt of some prearranged signal from the engineer.

WHAT do you consider the biggest railroad in the world, and on what do you base your claim?—F. B., Cumberland, Maryland.

It is generally claimed that the Pennsylvania system of railroads constitutes the largest railroad in the world. For that reason, the following statistics, issued under date December 31, 1909, will be of interest. The records show that the length of the railroad is 11,234.36 miles, of which 6,294.32 miles are east of Pittsburgh and Erie, Pennsylvania, and the remainder, 4,940.04 miles, is west of Pittsburgh. The lines run through fourteen States, in which live more than one-half of the ninety million people in the United States. The system has 11,234.36 miles of first track; 3,348.39 miles of second track; 760.10 miles of third track, and 570.20 miles of

fourth track. It also has the enormous trackage of 8,184.89 miles of sidings, bringing the total track mileage for the system to 24,097.94 miles. The Pennsylvania Railroad is essentially an institution of the State of Pennsylvania. In that State are located 4,101.03 of the 11,234.36 miles of line.

J. R., Virginia City, Nevada.—It is difficult to venture an explanation for a derailment, at this long range, because the majority of these accidents are quite puzzling, and require a thorough study on the ground of both the engine and the track. From your description of the engine at fault, in which you mention excessive flange wear or cutting of the right back driving-tire, it would appear that the preliminary move in looking toward a solution would be to measure the spacing of the tires on each pair of wheels in relation to one another. That is, to measure across the engine between the inside faces of the tires on each pair of wheels. On a 4-6-0 engine, such as referred to, this dimension should be $53\frac{1}{4}$ inches for numbers 1 and 3 pair of drivers, and $53\frac{3}{8}$ inches for number 2 pair, or the main wheels. If these measurements are approximated to, and the engine is properly squared across the various pedestal jaws, there remains nothing else to do but make thorough inquiry into the condition of the track, particularly so far as regards the elevation of the outside rail and the spread of the gage on the curve. From this distance, the matter looks like a case of improper tire-setting, but a close scrutiny of local conditions will be found of far more value than mere conjecture.

C. E. B., Emporium, Pennsylvania.—Your scheme for revolutionizing the present method of supplying locomotive boilers with water does not carry any particular appeal. The fact should always be borne prominently in mind, in connection with American locomotive practise at least, that the complication of already adequate devices for the sake of some visionary benefit has never received much encouragement. There is nothing new in the idea of having the air-pump exhaust heat the water in the tank, but it would be very new indeed if some one would arise to point out any good which resulted from the practise. The addition of a pump on the tender to the existing appliances would be unnecessary, and the substitution of the pump for one of the injectors would entail a much greater steam drain on the locomotive boiler than that now imposed by both injectors, even though both were working at the same time. We gather quite clearly the idea on which you are working, but the plan impresses us as being too cumbersome and with no certainty of better results than under the present arrangement.

J. O. A., Sparks, Nevada.—In order to secure the desired information relative to the railroads of South America, we can suggest no better procedure than that you address the Bureau of South American Republics, Washington, District of Columbia.

Ten Thousand Miles by Rail.

BY GILSON WILLETS,
Special Traveling Correspondent of "The Railroad Man's Magazine."

WHEN our traveling correspondent sailed down the broad, placid bosom of the Mississippi River aboard a steamer laden with Brotherhood men and their wives and sweethearts—the days bright and sunny and the nights warm and starry, and everything making for peace and happiness—well, he wafted into that atmosphere that made Omar Khayyam and other literary gents of the glad old days write for a living. In such a crowd and under such conditions, little wonder that the stories came thick and fast.

No. 6.—WITH THE BROTHERHOOD BOYS.

The Frisco's Hall of Fame—A Male Delilah—Saved by a Thumb—The Vanishing Thousand—Getting Even with the Super—How "Fatty" McBride Appeared in the Role of an Actor.



SOUTHERNER, in the regulation frock coat, black slouch-hat, black string-tie, white plaited shirt-bosom, and speckled-gray goatee, strode into the newly opened offices of the Frisco System, in New Orleans, and stepped up to the man behind the counter. He said:

"At the solicitation of the soliciting agent of this railroad, a gentleman named Napoleon Bonaparte Hoskins, sir, I shipped a car of goods over your line to this city. It has been delayed in transit, sir, and I've come yere to ask about it."

"You gave the business to the right person," replied the man behind the counter. "Napoleon Bonaparte Hoskins is all right. But at this end, sir, I am not the man you want to see. I'm the city passenger-agent here. My name is Marc Antony."

The colonel viewed Marc Antony sharply. "Oh, so your name is Marc Antony, is it? Well, Mr. Marc Antony, as you're not the man I want to see, will you be kind enough to direct me to the right person?"

"Yes, sir. You want to see our freight-agent at the Terminal Station. His name is George Washington."

This time the Southerner swept Marc Antony's face with a startled look.

"Ah, his name is George Washington, is it? And he's the freight-agent at the Terminal Station? Might I ask you, sir, to tell me how I am to get to that station?"

Marc Antony knocked on the counter, and a colored porter came forward.

"Cæsar," said Antony, "go to the corner with the gentleman and put him on the right car for the Terminal Station."

"Pardon me, sir," said the colonel. "Did I hear you call this black man Cæsar?"

"Yes, sir. His name is Julius Cæsar."

"Well, then, sir, look here. This thing has reached the limit. I perceive that the Frisco System employs only men from the Hall of Fame."

"That's true, sir," responded the city passenger-agent with a twinkle in his eye. He expected now to hear the colonel protest against the "freshness" of Frisco employees in general, and to assert the belief that the

names given were not the right names of the men in question, and that he did not purpose to be joshed or jollied. Instead of a tirade of this sort, however, the visitor surprised City Passenger Agent Marc Antony and Porter Julius Cæsar by saying:

"I repeat, this thing has reached the limit. I give my business to an agent of your road whose first names are Napoleon Bonaparte. I come to your New Orleans office to ask about the delay of my car-load of goods, and I meet a passenger-agent named Marc Antony. I am then told by Marc Antony that he is not the person to answer questions about freight, and that I must go to a terminal station and see a freight-agent named George Washington. I then hear Antony command a porter to put me on a car for the terminal station, and the porter's name is Julius Cæsar. Therefore, sir, I repeat, this thing has reached the limit. I shall ship no more goods by this line. Hereafter I shall ship by some other line."

"Why, sir, what's the matter with the Frisco?"

"What's the matter? Well, with all your Bonapartes, and Antonyms, and Washingtons, and Cæsars, I allow, sir, that you're all *dead* ones. I'm going to give my business hereafter to a line that employs *live* ones!"

The Mississippi River steam-packet, on which I heard the above story, was the John Spreckus. She pulled out from the levee, at the foot of Canal Street, New Orleans, one Sunday evening, carrying seven railway-clerks—two from the Illinois Central, two from the Yazoo and Mississippi Valley, one from the Southern Pacific, one from the Texas and Pacific, and one from the Frisco System. Among themselves they were known as men from the Eye-See, the Yazoo, the Espee, the Tepee, and the Frisco.

I had boarded the steamboat with three of them for an evening sail up the Father of Waters. The other four joined us soon after the boat pulled away from the levee.

"We've chartered this boat for a special night excursion," one of the clerks said to me. "You'd better come along. There'll be about five hundred railway-clerks on board that night."



The boat had been chartered by the Illinois Central division of the Brotherhood of Railway Clerks of the Crescent City.

"We're about seven hundred strong, just on the Eye-See in this city," they said. "We've got a splendid organization, and the Eye-See is very good to us. Chips in and helps us royally."

His Name Was Delilah.

"Tell him that Samson story, Frisco, about that section foreman up at Crowley," said one of the clerks. Here it is:

Ferguson Todd, section foreman, Frisco System, Crowley, Louisiana, had muscles that stood out on his arms like Sandow's, and hair that fell over his collar like Buffalo Bill's. His men stared in admiration at his muscular development, but upon his overgrown mane they heaped contumely. But Todd absolutely refused to get a hair-cut, entertaining the belief that, somehow, the mane had something to do with the muscle.

It came to pass, however, that Todd was invited to a dance to be given by a division of one of the railroad brotherhoods in Crowley.

"You shore will have to clip about a yard off those locks, Ferg," said one of his friends, "or no gal will trip the light fantastic with you. Gals won't do no 'Merry Widow' steps with a freak."

"But," protested Todd, "supposin' the hair-cut should rob me of my strength, like it did to that man we learned about in Sunday-school? Only yesterday, down the track on the Maxie ranch, I took up a seven-hundred-pound rail and stood it on end.



—SUH! DID YOU CALL
CAESAR?"

D'you suppose I could do that after gettin' a hair-cut?"

"Sure, Ferg. You'll be our Samson just the same."

"But supposin' the barber should prove to be my Delilah?"

"Ferg, we all know that the hair of your head ain't got no more to do with your strength than the hair of your face. You shave every other day, don't you? Well, shaving the hair off'n your face doesn't re-

duce your liftin' powers, does it?"

The dance was to take place on Saturday night. Ferg Todd, with fearful misgivings and with a look suggestive of terror, entered a barber-shop. A little later he came out with hair no longer than that of any other man on the section. Gone were his Buffalo Bill locks, and Todd felt like blubbering. What if he had lost his strength? He resolved to test the effect of that hair-cut at once.

With hope for the best surging in his breast, he walked down the track till he came to where that seven-hundred-pound rail lay.

"I stood this rail on end yesterday with long hair," he told himself. "Can I do it now with short hair? Here goes."

He seized hold of the rail. Up it came, free of the ground. He smiled happily. The muscles stood out on his arms. Up still further went the rail, till he had the end of it on a level with his thigh.

"It's dead easy," he muttered. "Hair ain't got nothin' to do with it at all."

But just then, alas! his strength gave out as suddenly as if he had been stricken with paralysis. Collapsing in his tracks, the rail fell across him, breaking his leg.

That evening at the dance all the brotherhood men, and the ladies, too, asked what had become of Ferg Todd, the section foreman. The friend who had induced Todd to get his hair cut assured everybody that Ferg would show up, adding that the section foreman had had his hair clipped purposely to come to the dance in presentable shape.

When the dance broke up, at dawn on Sunday morning, Ferg Todd had not put in an appearance.

About eight o'clock that Sunday morning,

two sons of one of Ferg's section-hands were walking up the Frisco track, when suddenly they heard a voice shouting for help. Seeing a man lying helpless on the ground, with a rail across his legs, they rushed to him.

"Why, Mr. Todd!" the boys exclaimed. "What's happened?"

"Pry this rail off me and ask questions afterward," replied the foreman. He told the boys to go to a near-by tool-box and fetch a couple of claw-bars. He then showed them how to ease up the rail with the bar. Presently he was free from the terrible weight.

"How long have you been lying here, Mr. Todd?" the boys asked.

"Since five o'clock last night—fifteen hours of fierce sufferin'. Get some help, 'cause your Uncle Todd can't move by his lonesome."

One evening, six weeks later, Todd came limping out of the hospital, no longer the strong man of the Frisco System. Limping from the hospital direct to the barber-shop where he had his hair cut, he stepped up to the tonsorial artist and, shaking his fist, cried:

"Hang you! I ought to wring your neck! Your name's Delilah. S'help me! I'm going to let my hair grow now right down to my feet. Then I'm going to come to this here boudoir and tear your barber-chairs up by the roots with one hand and wipe up the floor with you with the other! Your name's Delilah!"

Saved by a Thumb.

The Tepee man obligingly entertained us with this:

"Only the other day," he said, "I met a lot of Espee clerks in a lunch-room on Canal Street. One of them said:

"What's an alligator? A fish or an animal or a vegetable or what?"

"What do you want to know for?" I asked, looking as if I knew all about alligators and didn't want to tell.

"Why," he replied, "we've one entire car-load of alligators going out on our road to Los Angeles. What puzzles us is how to apply the rate. Now, if alligators are fish or shell-fish, the charge for the car-load will be about five hundred dollars. Well, are they fish?"

"Fish nothin'," put in another Espee man. "Alligators are live stock. You just apply the rate for live stock and you'll be all right."

"We've thought of that," returned the first Espee man. "But somehow it doesn't seem to apply with exactitude. However, if the alligators are rated as live stock, then the freight

will be over six hundred dollars. What do you say, Eye-See?' he added, turning to me.

"I looked exceeding wise and, making a wild guess, said, with the supreme conviction of the accuracy of my statement:

"'You're both wrong. Alligators are neither fish nor live stock. Alligators are "animals not otherwise specified," and the rate should be applied to them as such.'

"'Hanged if he isn't right,' said the first Espee clerk. 'I'll just spring that on our rate-man as the product of my own big head.'

"Next day at luncheon, I again met the same Espee men in the same lunch-room. One said to me:

"'Hanged if our rate-man didn't bill that car of alligators as "animals not otherwise specified." He liked that classification because the freight under that head amounted to about nine hundred dollars, thus raising fish four hundred and live stock three hundred. Whenever we get in a muddle like that again, Eye-See, we'll come to you.'

A parson was hurt in an Eye-See wreck and was given five thousand dollars in set-

tlement of his claim. A year later, the Eye-See claim-agent at New Orleans received a letter from the parson, enclosing a check for four hundred dollars. The letter stated that the writer had been laid up for one year, hence losing his pulpit salary of two thousand dollars. His medical expenses amounted to seven hundred and fifty dollars. His board at a sanatorium, eight hundred and fifty. Incidental expenses incurred as the result of the injury, one thousand dollars. Balance on hand, four hundred dollars, which he now returned.

Whereupon, the Eye-See rewarded the minister for his honesty by returning the check and asking him to keep it as a present.

By return mail came another letter from the parson saying: "Thanks for your check for four hundred dollars. Have donated it to the disability funds of the local divisions of the railway brotherhoods."

By the time the Eye-See claim-clerk finished telling this story of the conscientious parson, our steamboat was passing the great Stuyvesant docks, so named in honor of Stuyvesant Fish, then president of the I. C., through whose enterprise the docks were built.

"Reminds me of a story of Mr. Fish which I know to be true," said the same Eye-See claim-clerk. "Just before Mr. Fish resigned the presidency of the Illinois Central, a great number of claims had been presented by people along our line in Kentucky, who said that our trains had killed their horses. Every one of the claimants stated that his horse was, positively, the bluest blood in Kentucky, regardless of the kind of scarecrow it might have been.

"Mr. Fish heard of these claims from time to time, and finally he uttered this sage remark:

"'By George! I've lived long enough to learn that absolutely nothing so improves the breed of horse-flesh in Kentucky as to cross a horse with a locomotive. For Heaven's sake, let's cease crossing Kentucky horses with locomotives!'"

"That reminds me," said another clerk. "Mr. Fish was himself a brakeman once. Did you fellows know that?"



"Sure."

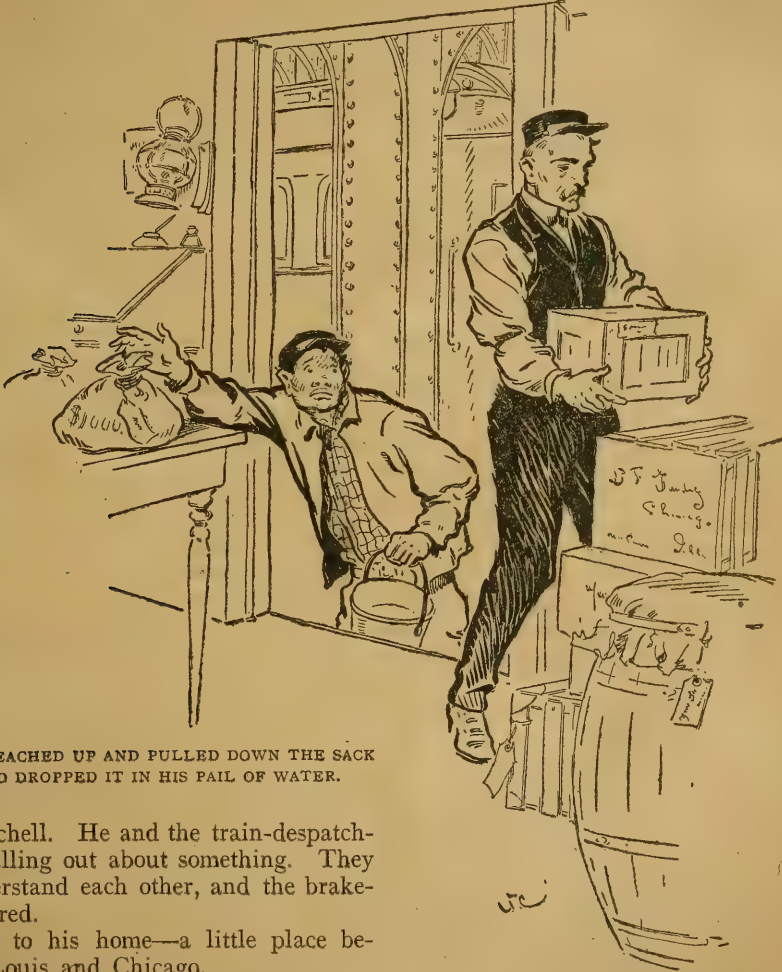
"And any man who swung a lantern could get his ear any old time. He believed in the square deal, and always took a personal interest in the men, and once he showed his interest this way:

Up St. Louis way, there was a brakeman

"I am Mr. Fish. You want to speak with me? You are a brakeman. I know it by the way you got over that rail. Come inside."

Mr. Fish led the way into the car, and there Mitchell quickly told his story.

"I see," Mr. Fish said. "What you want



SAM REACHED UP AND PULLED DOWN THE SACK AND DROPPED IT IN HIS PAIL OF WATER.

named Mitchell. He and the train-despatcher had a falling out about something. They didn't understand each other, and the brakeman was fired.

He went to his home—a little place between St. Louis and Chicago.

A few days later a passenger-train, with a private car attached, pulled into that little place. Mitchell recognized the car as the one always used by Mr. Fish. Straightway he walked down to the car, and found a number of men sitting on the rear platform. Mitchell didn't know the Eye-See president when he saw him. He said, simply:

"Is Mr. Stuyvesant Fish up there?"

"Yes," replied a tall man.

"I would like to speak to him."

"All right. Come aboard."

Mitchell climbed over the rail, and the tall man said:

is fair play. You shall have it. Go back to St. Louis and report for duty. It will be all right by the time you get there."

Mr. Fish penned a telegram to the despatcher, ordering him to reinstate Mitchell. Mr. Fish then gave Mitchell a cigar, saying:

"I suppose you know that I have swung a lantern myself?"

"Yes, sir. I understand," Mitchell answered.

The Vanishing Coin.

"Speaking of fifty cents reminds me," said another Eye-See clerk, "of that long-un-

solved mystery of the disappearance of a sack of money from the Pacific Express car. It contained a thousand dollars in fifty-cent pieces, and the mystery of its disappearance was cleared up only the other day—through the cleverness of an Eye-See railway clerk.

"An Eye-See train, with a Pacific Express car attached, stood in the Union Station, New Orleans, ready to pull out. In the express-car were several sacks of silver coins, among which was one containing one thousand dollars in fifty-cent pieces. These bags of money had been shipped by a local bank, and were consigned to banks in the northern part of Louisiana.

"The express messenger in charge of the car was making things shipshape for the journey when, suddenly, he missed that thousand-dollar sack of half-dollars.

"'It's gone!' he gasped.

"Calling to the station-men, the express clerk communicated the horrifying news.

"Somebody had stolen a thousand dollars from under his nose!

"'I handled it—right on that table—only a moment ago!' he declared. 'How could it vanish like that? I haven't been out of the car a minute since we've been here!'

"The superintendent of the Pacific Express at New Orleans, Mr. Maunch, was told what had happened, and he immediately put a number of Eye-See special officers on the case. Months passed and not a single clue was found.

"In February, however, a certain Eye-See railway clerk happened to hear that a negro named George Johnson was riding around New Orleans in a new buggy. The clerk was further told that the negro had paid cash for the buggy, and for the horse, too, in half-dollars.

"'Let me see,' said the clerk to the liveryman who gave him this information. 'George Johnson was a car-cleaner on the Eye-See some months ago. He was discharged, was he not?'

"'Yes. His father died just then, however, and George received some money for a life-insurance policy. That's where he got the money for the horse and buggy.'

"The Eye-See clerk went home and wrote an anonymous note to Mr. Maunch, saying that a certain colored man named George Johnson, living in Fourth Street, would bear investigation regarding the missing sack of half-dollars.

"Within two hours after receiving that note, Mr. Maunch had Johnson lodged in jail, after having secured a full confession.

"Johnson, while on his car-cleaning job, had passed the open door of the express-car. He saw a sack tagged '\$1,000.' Seeing also that the express clerk's back was turned, he reached up, pulled down the sack, and dropped it into his pail of water, then sauntered on.

"'Got any of the money left?' asked Mr. Maunch.

"'No, boss,' replied Sam, with a gleeful chuckle. 'Ah done spend the last one of them half-dollars last night, feedin' po'k-chops and tamales to members of that there colored burlesque troupe!'

A Real Boss.

Two weeks after my sail up the Mississippi I arrived in St. Louis. There I met "Pop" Orrison, of Iowa, an ex-engineer of the Minneapolis and St. Louis Railway, who told how certain divisions of his brotherhood had chartered a Mississippi steam-packet for an excursion up the river. On that trip "Pop" Orrison told this old-timer story, which I repeat here.

The old Louisville Railroad—the L., M. and B., dubbed "The Lame, Mangy and Blind"—had for master mechanic James Vintin, commonly known as Uncle Jim. Uncle Jim was really the railroad. He ran it. He bossed it. What he said went. He accomplished this feat through sheer force of right-backed by might.

A just man was Uncle Jim, big and strong, always ready to give the men a square deal. He was a fighter who enforced his rulings for a square deal with formidable fists.

When excited, Uncle Jim had a habit of closing his thumbs tight to his fists and then spitting on them.

Under Uncle Jim was an engineer who had red hair, and was generally called "Red-head." He was the most reliable, the very best engineer on the road.

One day Uncle Jim received an order from the superintendent, Dick Carron, to dismiss the red-haired throttle-handler, whereupon Uncle Jim, in great wrath, called "Red-head" into his office and said:

"Look here, you flame-headed imp, you're not fired yet; but you're going to be, unless you tell me the truth about the matter mentioned in this writing." He handed the engineer the superintendent's letter.

"Red-head" told his side of the story, satisfying Uncle Jim that a square deal was not being handed out by the superintendent.

Grasping "Red-head's" arm in a vise-like grip, Uncle Jim hauled him over to the superintendent's office.

"Look here!" said Uncle Jim, addressing the superintendent and spitting vociferously upon his two thumbs. "I'm going to show you that you ain't runnin' this road to suit yourself. I'm going to convince you that you can't fire my men when there's no justice in it."

During this speech Uncle Jim had advanced across the room toward the super, who had retired with terror-stricken face into a far corner.

"Yes, sir; I'm going to pitch you head-first out of that window," announced Uncle Jim, as he spat some more on each thumb. "I say, you're going to meet your hereafter right now through that there window."

With that, he picked up the terrified super in his two brawny arms and carried him to the window.

Just then the entire office force, hearing the scrimmage, fell upon Uncle Jim, and begged him to spare the super's life.

"I will listen to you," said Uncle Jim, "if this clam called a man will order my red-headed engineer reinstated this minute. Otherwise—" And he shoved the super half out of the window.

"Yes, yes!" gasped the super. "Your engineer may remain at work."

Uncle Jim pulled the super back into the room and dropped him in a heap on the floor. Then, turning to "Red-head," he said.

"Go back to work, you half-witted bumblebee! How dare you put the superintendent of this railroad to all this bother? Get on your engine and pull out of here, quick!"

"What I've just told you of the Uncle Jim story," said Pop, "was as far as I told it to the Io-way boys, that day of the excursion. Now, you'd think railroad men would want to know how it happened that the master mechanic of a road could run the whole shooting match, even to threatening the life of the super for discharging one of the men. But, no; these Io-way boys didn't ask me a single why.

"We're in Missouri now, however, and I suppose you want to be shown. Well, sir, the road hadn't any money. That explains Uncle Jim's cinch. The company owed Uncle Jim a whole lot of salary, and didn't dare try to fire him without first paying him.

"As the result of this shortage of cash, something interesting happened not long after that day when Uncle Jim bullied the super into reinstating the red-headed engineer.

"Red-head," said Uncle Jim, one morning as the engineer was about to pull out, 'maybe a man will board you to-day somewhere down the line. He will show you a bit of paper, and affirm in the name of the State of Kentucky that your machine is seized for taxes. This is a warning to you not to come back here without your engine—understand? You bring this machine back!'

"Here Uncle Jim paused and spat on his thumbs. Then he added:

"If you come back without this engine, I'll thrash you to a pulp, after which I'll fire you without a cent of all the wages due you.'



"HE PICKED UP THE TERRIFIED HELPER AND CARRIED HIM TO THE WINDOW."

"All day the master mechanic waited anxiously for 'Red-head's' return. About dark, sure enough, the red-headed engineer returned in his cab, all hunky.

"'Did you-all have any trouble?' asked Uncle Jim.

"'Should say I did,' replied the engineer. 'I'm a "delinquency."'

"'You're a what?' thundered the master mechanic.

"'I'm a "delinquency." A one-legged man says I am. He said that, therefore, I am also a "misdemeanor" and a "writ of attachment."'

"'A one-legged man? Who was he?'

"'He's the man you said would board me with papers, and would seize the machine for taxes. Well, Mr. Vintin, he did it just as you said. He held me up for about ten minutes. When I'd been seized, and learned that I was a "delinquency" and all those other things, the conductor sudden gave me the signal to pull on. Did I pull on? Bet you!

"'I forgot to tell you, Mr. Vintin,' 'Red-head' continued, 'that there were four other men assistin' the one-legged man in the seizure. When I got the signal to move on I pulled the lever before any of those five men could stop me. Then I motions to my fireman to kick out the water-glass. He does it, quick as a wink—and there was the worst racket in the way of an explosion you ever heard of. That scared the one-legged man and the others so they didn't tarry a moment to maintain the seizure. They just called me a "delinquency" some more, and also a "resister of the law," and then they abandoned me any old way they could.

"'The one-legged man left his crutches behind, which I now have the honor to present to you as a trophy. And here's your engine. You can get some one else to run her. I'm resignin' without pay.'

"'You're going to resign, are you?' belowered Uncle Jim. 'After I nearly committed homicide on the super to keep you on the job, you're now going to quit me, are you? Well, then, I'm going to prepare you for the obsequies.'

"'Mr. Vintin,' cried the engineer, as he hurriedly sprang into his cab and prepared to take his engine to the roundhouse, 'this road hasn't paid me any money in so long a time that I haven't a cent for my funeral expenses. Therefore, I'll have to ask you to postpone the obsequies, and I'll withdraw my resignation.'

I had received a letter from a railroad man

living in Burlington, Iowa, in which I was told that "Pop" Orrison would be in St. Louis, at the Terminal Hotel in the Union Station, on Good Friday.

At five in the afternoon on the day mentioned I was there. There was an immense crowd in the depot. It was as big as the one that had greeted President Taft upon his arrival there a few months before—perhaps ten thousand strong.

Suddenly the throng broke into wild, tumultuous shouts as a remarkably pretty young woman appeared at the gate marked "Track Eight," on which a Pennsylvania Railroad train had just arrived.

The crowd surged toward her like a wave, and for a moment it looked as if the young woman would be drowned in the human sea. Policemen and station-men plunged to the rescue of Miss Florence Lawrence, moving-picture actress, who had been photographed five million times, and was known as "The Girl of a Thousand Faces."

As an opening was made for her, I saw a man with white hair and beard.

Hastening to him, I said:

"Isn't this Mr. Orrison?"

"Sure thing, son. I'm called 'Pop' Orrison.

"Son," he said presently, "I'm some busy with a veteran association till Sunday afternoon. I'll be free then, and I'm goin' to walk across that big Eads Bridge for the first time in my life. Will you join me?"

I said I would—and that's how I came to be on the Eads Bridge with the ex-engineer of "Io-way."

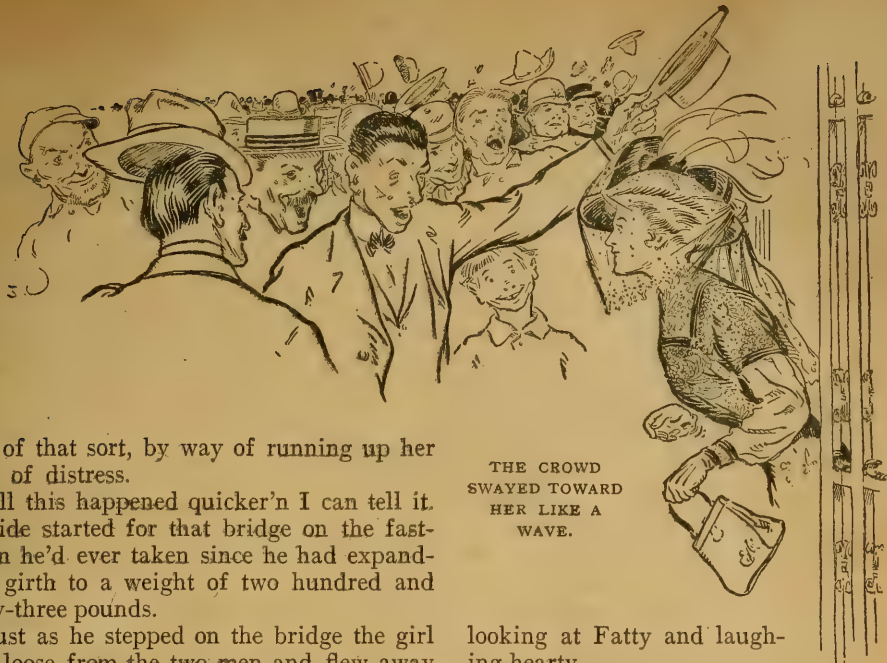
On that occasion the old railroader related the following:

Actor in Spite of Himself.

"Seein' the moving-picture actress received by that crowd o' greeters, the other day at the Union Station, reminds me of a racing experience of one of the fat men of our brotherhood—an engineer out of Chicago, called 'Fatty' McBride.

"One awful hot day McBride was taking a Sunday afternoon stroll in the Windy City suburbs. As he approached a bridge across the Chicago River, he suddenly saw a young woman start over the bridge, stealthily followed by two men. In the middle of the bridge the men pounced upon the damsel, and lifted her up to the rail as if to throw her into the river.

"The girl struggled like a demon, but she didn't open her mouth to scream, nor any-



THE CROWD
SWAYED TOWARD
HER LIKE A
WAVE.

thing of that sort, by way of running up her signal of distress.

"All this happened quicker'n I can tell it. McBride started for that bridge on the fastest run he'd ever taken since he had expanded in girth to a weight of two hundred and twenty-three pounds.

"Just as he stepped on the bridge the girl broke loose from the two men and flew away at a marathon gait, with the thugs pursuing her.

"By George!" exclaimed Fatty McBride. "That damsel is in terrible distress, and it's up to me to save her."

"So he rushed to the rescue, feelin' thrills runnin' down his spine like they say heroes do when about to perform a medal-winning deed.

"Down to the railroad tracks flew the damsel. The thugs overtook her, seized her, threw her down on a rail, and proceeded to lash her fast with the ends of a long black sash that she wore around her waist. Having tied the girl, the two men ran away.

"All this time Fatty McBride kept running, and just as the thugs got the damsel tied fast to the rail, and just as a locomotive was seen coming toward her down the track, Fatty rushed up, puffing like a mogul on a grade.

"As the locomotive came toward them, Fatty knelt over the girl and began to untie her. What does the damsel do but begin laughing so hard that tears stream down her face.

"You're sure a brave gal,' says Fatty, between his blowing and puffing, 'to laugh like that in the very face of death. But I'll save you, gal, don't worry.'

"Just as he untied the last knot the girl jumped up and off the track, still shouting with laughter. The train rolled slowly by, with the engineer leaning out of his cab

looking at Fatty and laughing hearty.

"Then Fatty heard a man yelling:

"You're all right, Fat! You're a born actor! Bully for you!"

"This is a moving-picture outfit. When we saw you fly to the rescue of the girl on the bridge, we decided it would be a good stunt to let you go as far as you liked. The original plan was for the girl to untie herself from the rail with her teeth, but you got her to laughing so hard, Fat, she couldn't play her part, and so she let you set her free. The engine was to stop on the safe side of her, of course."

"Well, I'm hanged!" exclaimed Fat.

Had Holes in It.

Frank Roden, the commercial agent of the Chicago Great Western Railroad, was in St. Louis. One morning, while making my daily round of the station, one of the boys said:

"Frank Roden showed up here a few days ago, and warned every railroad man under these roofs to look out for a stuttering boy.

"One morning, Frank Roden received the following letter:

"Dear Sir: As you are an old friend of my father, I venture to inform you that I have lost my pocketbook and transportation to Chicago, and to ask you kindly to telegraph this news to my father, as I have no money myself for the message. My father, as you probably know, is at present the station-agent of the Chicago Great Western at



"I'LL SAVE YOU, GAL, DON'T WORRY."

Dubuque, Iowa. Will you please ask him to wire me the money for car fare and expenses to Chicago?'

"Good-hearted Frank Roden at once wired his old friend at Dubuque. Hardly had the despatch gone forth than a young man entered the commercial agent's office and tipped toward Mr. Roden's desk, his cap in his hand and timidity written legibly in his countenance.

"'Well, young man,' said Roden, 'what can I do for you? Don't look so scared. I'm only a human. You looking for a job?'

"'I'm the au-au-au-au-author of that let-let-letter asking you to tel-tel-tel-telegraph my fa-fa-fa-father,' replied the young man.

"'That so? Shake hands! Glad to see you! Glad to see any son or daughter or any person who's related to my old friend.'

"'I need fun-fun-fun-fun-funds,' stammered the young man. 'Will you ple-ple-ple-please lend me a dol-dol-dol-dollar while waiting f-f-f-for my fa-fa-fa-fa-father to an-an-an-answer your tel-tel-telegram?'

"'Oh! You're as dead broke as that?'

"'Ye-ye-ye-yes, sir. I'm com-com-com-completely bus-bus-bus-busted.'

"'Oh, well, since you're a son of my old friend at Dubuque. I'm mighty glad to be of service to you. Here!' He peeled off an ace from the stack and handed it to the young man.

"'Tha-tha-tha-thank you, sir. When shall I ca-ca-ca-call for the mon-mon-money?'

"'The answer should be here in about two

hours, my boy. He'll probably telegraph the money. You come back here about ten o'clock, and I have no doubt but that you'll then be on Easy Street.'

"Ten o'clock came, but the stuttering lad failed to put in an appearance. Eleven o'clock tolled, and still the stammerer came not. Just then, however, came the answering wire from Frank Roden's friend in Dubuque, reading: 'Have no son, never did have, and never expect to have.'

"'Stung!' cried Frank Roden.

"It was just after receiving that telegram that Frank Roden hop-skipped-jumped among the railroad men at the Union Station, warning them against a stuttering boy.

"'So you were stung for a dollar, were you?' asked the clerk at Charlie Gilpin's cigar-stand when Roden told his story.

"'A dollar!' the commercial agent exclaimed. 'Say, you just multiply that by two and then add some, and you'll come nearer the real sum. Didn't I send a telegram for him? And didn't it cost me fifty-five cents? But even that isn't all! What gets most on my nerves is the fact that my dear old friend, our station-agent at Dubuque, wired his answer *collect*! That cost me fifty-five cents more. Sum it up for yourself, and you'll see that I've been stung for exactly two dollars and one dime by a hu-hu-hu-human hornet with a brand of con-con-con - con - conver - con - conver - conver-conversation that had an aw-aw-aw-awful lot of ho-ho-ho-hoho-hohoho-holes in it.'"



LEGS BROWN HAS A ROUND-UP.

BY ROBERT T. CREEL.

**It Was a Battle Royal While It Lasted, but
Bully Hackett's Yellow Streak Ended the Fight.**

HOW he came to be braking on the C. I. W., it would be impossible to say. It is doubtful if Legs Brown himself knew. He was a boomer brakeman, and, as such, he traveled by no schedule whatever. To ordinarily find him at any given time, you might inquire on any railway division in America with an equal chance of success.

He reminded you of that insect whose amiable disposition and attenuated appearance have won for it the sobriquet of "grand-daddy-longlegs." Hence, Brown's own nickname. Notwithstanding his fragile proportions, however, when occasion arose he could wield his huge fists with force sufficient to fracture a jaw-bone, or drive a man's ear into the side of his head—a fact that had been demonstrated to the sorrow of more than one belligerent hobo.

As the long train of flat cars writhed in and out among the sand-hills, Brown, stationed a short distance ahead of the caboose, was the only person visible. According to his habit when unusually elated, he stood perfectly erect, with hands clasped before him and his soft hat pulled down over his bullet-head, in the manner of a Hebrew comedian.

At intervals he wailed forth the words of a song to the effect that the life of a sailor is fraught with hardship, inasmuch as a certain youth, Johnny by name, had been drowned in the deep, blue sea. Many verses he sang, and each one varied from its predecessor only in the name of the victim. From which

symptoms, it was plain that something conducive to his happiness had occurred, or might soon be expected to occur.

His joy, in this instance, was that of anticipation, and its source may be told in the one word—trouble. Although he never voluntarily sought a conflict, Brown was not one to leave the scene of a fight while there remained a chance of participating therein.

At the last stop, Murphy, the conductor, had received a telegram warning him to be prepared for an attack when they entered Sandville. A large number of hoboes were gathered there, and had taken possession of the town, explaining to the unhappy citizens the necessity of majority-rule, if the republican form of government was to be maintained in the land.

Previous experience similar to this had detracted from the novelty of the situation for the few inhabitants of Sandville; but the hoboes were becoming bolder, and spoke of capturing the next train that came thither, for the purpose of making their escape. Whereupon, the station-agent had grown alarmed and sent the telegram.

Among his other characteristics, Brown was intensely loyal to the road that chanced to employ him. Any action such as that contemplated by the hoboes was resented as a personal affront. Furthermore, at this particular time he knew that the president of the road was but a few hours behind in his special, and Brown deemed it his duty to do all in his power to prevent any unpleasantness when the great man should arrive.

Therefore, as they drew near the little

hamlet he returned to the caboose and conferred with the conductor.

"They's no use runnin' clear in, Jim. You better stop on the edge of this here metropolis, while I go in an' reconsider the force of the enemy, as they say in the army."

"I wouldn't advise you to go alone, Legs. You can't tell what those boes'll do if they're drunk."

"Why, Jim, you know them fellers're like sheep. The only reason I can see for 'em actin' like this is because they got a leader. If that's the case, all I got to do is to sling him around like he didn't cost much, an' that'll take the fight right out of 'em. Besides, if a bunch of us go in, they'll git ready for trouble."

"All right, you can go while we stop for water. That'll give you time to see what they're up to."

So it was that, on foot and unaccompanied, Legs Brown ambled into the captured town. He had no doubt as to the location of the triumphant hoboes, for, though it was now almost dark, the only place that showed a light was the saloon, and to this he directed his steps.

Within, a motley gathering of vagrants, in various attitudes of repose, shouted their orders to the bartender, evidently bent on making the most of their unwonted authority. Supposing Brown to be a farm laborer, they hailed him with delight, anticipating an evening's sport, and sport there was, albeit of a character slightly different from what they had expected.

At the bar stood a swarthy, well-set fellow, whose curly hair and high cheek-bones, together with the peculiar conformation of his head, marked him as a native of Poland. This worthy was the most boisterous of the lot, but Brown thought it hardly likely that he was the leader, giving him scant attention, therefore, as he strode forward and ordered a drink.

"Here, ye rube, ye better ask me fer what ye want, 'r I'll break ye in two," said the tramp aggressively, pausing in the act of raising a glass to his lips.

Brown, reaching for his own drink, seemed not to hear the words, but his prodigious foot, as if released from a spring, suddenly swept up, and, striking the other's hand, threw the glass, with its contents, into his scowling face.

A storm of laughter arose from the on-lookers, who swore, with mighty oaths, that it was the funniest thing they had ever seen. The victim, however, laughed not at all, but

bellowed with rage and pain as the fiery liquid seared his eyes, and repeatedly yelled for Brown to come near, that he might be chewed up.

Not desirous of being masticated, nor yet willing to move out of the way of the Pole, who was blindly groping for him, Brown chose the only alternative, and smote him squarely between the eyes, so that he crumpled up on the floor. Then, turning to the man's comrades, he broached the business of the evening.

"I want to tell you dirty bums that I'm going to take charge of this here city government from now till I leave. If any of you've got anything to say, why, you can step up and say it. You might be able to bluff these pore devils that live here, but I've seen too many boes not to know what you're made of. You're all under arrest, an' the first man that moves'll git plugged." The brakeman placed a hand on his hip-pocket, which, by the way, held nothing but his red bandanna handkerchief.

"Now, I want to see the man that's at the head of this outfit. Who put you up to this job?"

One of the men shrugged his shoulders contemptuously. "You better wait till you hear from Bully Hackett before you pinch this gang. Guess that's him now."

Following a sound of shuffling footsteps, the illustrious leader himself appeared in the doorway. Bully Hackett's visage was one of those of which the worst dreams are made. While it was rendered somewhat vacant by the absence of his nose, one of his eyes, and the major portion of his upper lip—unwilling sacrifices to the god of war—his expression lost none of its ferocity on that account, and his shaggy hair and beard gave him a look that was scarcely human.

Mr. Hackett had been engaged on a private foraging expedition, and knew nothing of the happenings within the saloon, nor saw the brakeman, as he came toward the bar.

"Wot's the matter?" he inquired savagely. "Didn't ye see that freight pull in?"

By way of attracting his attention, Brown struck him smartly on the part of his face formerly occupied by his nose.

"Yes, an' she'll lay there till she rots, if she waits fer you to take her out. By the time I git through with you, you'll be ready to crawl in your hole," said the brakeman. He had seen the train-crew gathered in the shadows outside the door, and now had little to fear from the other hoboes.

Possessed of keen perceptions, as are all

great leaders, Hackett at once suspected that the brakeman had struck him intentionally, and his one eye gleamed redly.

"Yah-h-h!" he snarled, too angry for more intelligible speech.

"Better take off your coat, because I'm not a goin' to knock you out. I'll make you quit like a dog, so the rest of these gents'll see what you are," stated Brown, removing his own outer garment.

Hackett waited not for further advice, but lashed out so viciously with his right arm that Brown was taken unawares; and, had it not been for the bar at his back, he would have gone down ignominiously. Even so, he was in an evil plight, for the tramp, seeing his opportunity, rushed in, raining blows on the face and body of his opponent.

Then, indeed, did it seem that the brakeman had been overconfident in his boasting. The other hoboos shouted encouragement to their champion, and the train-crew were only restrained from joining in the fight by the conductor, who continued to voice his belief in Brown's prowess.

Veteran of a hundred battles, Brown's first move was to stop the flailing arms. This he did by the simple expedient of twining his own about them. Gradually, with the apparent sinuosity of a boa-constrictor, he wrapped his limbs about those of the other, and, for a moment, lifted his own feet clear of the floor, making Hackett support the weight of both their bodies. Then, unmindful of his struggles, Brown as carefully freed himself, sending the hobo backward with a solid jolt on the spot where his first blow had landed.

Brown was intent on proving a theory that he had long held, namely, that a man, though inwardly a coward, may fight with seeming bravery so long as the blows of his adversary have not the appearance of being well-judged or aimed with accuracy; but that a succession of blows, however light, on a sensitive spot, will make him quit if he has the least vestige of a yellow streak.

During the next few minutes, so fiercely did Hackett assail him that the brakeman was almost entirely on the defensive. More than once he felt the impact of the tramp's horny fist on his face, but he still held to his purpose. When the opening offered, his hand flashed out, striking with invariable precision the spot he had selected for his attack.

Hackett manifested his displeasure at this mode of warfare, evidently thinking that Brown acted dishonorably in profiting by the absence of his nasal feature. At each of-

fense the tramp rushed in with the avowed intention of demolishing the whole of Brown's material body; and, to avoid these rushes, the brakeman executed a series of jumps that would have done credit to a grasshopper. Finding no obstruction in his course, Hackett went on until his head struck the wall, which so diminished his speed that he was enabled to make a short turn and again face his opponent.

For a long time they fought, neither gaining the advantage. Brown was bleeding freely from the mouth, and one eye was fast swelling shut; but his antagonist was also badly bruised, the remnant of his nose being quite raw. Of the two, Hackett seemed the more fatigued. Excessive drinking had made him short-winded, and he breathed heavily. The brakeman now began to force the fighting, striking more often and with greater force, but ever in the same spot. Hackett gave ground, and once he glanced back, as if seeking a way of escape.

"Stand up an' fight, why don't you?" panted Brown. "You claim to be the champion bo. Well, I ain't no kind of a champion, an' here you're tryin' to quit before I git warmed up. What kind of fightin' do you call that? Come on an' mix it a little."

But Hackett had had enough. His spirit was gone, and he slunk back into the crowd, whimpering.

"Stop 'im, boys; stop 'im," he pleaded. "My Heavens, my mug's broke in! I can't fight no more."

"You don't need to be scared. I'm satisfied," answered Brown. "I knew you was a quitter the minute I seen you, an' I wanted to show you up, so you couldn't lead these dubs into no more deviltry. What'll we do with 'em, Jim?" he asked, turning to the conductor.

"The best thing will be to lock 'em in a box car, an' hand 'em over to the sheriff at Rennington," replied Murphy, who was guarding the door.

From the dark recesses of the caboose he had brought forth an old revolver. With it to uphold his authority, the erstwhile conquerors were placed in line and marched to the waiting train, escorted by the crew.

To Brown, this closed the incident. He marveled greatly, therefore, when there came a commendatory letter from the company's chief executive, together with a small package, which, on examination, was found to contain a gold watch.

"That business must've leaked out some way or other," he remarked thoughtfully.

THE PENNSYLVANIA IN NEW YORK.

The New York Station of the P. R. R., Now Completed, Covers More Territory Than Any Other Building Ever Constructed in the World Within a Certain Time.

THE New York Station of the Pennsylvania Railroad, at Seventh Avenue and Thirty-Second Street, now completed, covers more territory than any other building ever constructed at one time in the history of the world.



THE CASSATT STATUE IN THE NEW PENNSYLVANIA STATION.

Alexander Johnston Cassatt, President, Pennsylvania Railroad Company 1899-1906, whose Foresight, Courage, and Ability Achieved the Extension of the Pennsylvania Railroad System into New York City.

The Vatican and the St. Petersburg Winter Palace are larger buildings, but they have been centuries in their construction. The Pennsylvania Station is unique, covering as it does eight acres of ground, with exterior walls extending approximately one half of a mile, all told, and having been erected in less than six years' time.

This station is not only the largest structure of its kind in the world, but it epitomizes and embodies the highest development of the art of transportation. Every practicable convenience, the most ingenious of mechanical and electrical inventions, every safeguard against danger—all, in fact, that has so far been learned in railway transportation and station perfection, has been availed of for the benefit of every passenger, no matter whether he is to take a short ride to Long Island or a two-thousand-mile trip to the West.

While the cost of the improvement represents a greater expenditure than was ever before incurred by a private corporation for a single undertaking, nevertheless it was required to unite the principal parts of the thickly populated area in and around New York City, and to provide unsurpassed facilities, in the very heart of the city, for reaching the entire country.

In 1901 the Pennsylvania Railroad was employing ferries to land its passengers in New York City, just as it did in 1871, when it first leased the United Railroads of New Jersey.

Railroads on the western bank of the Hudson River opposite New York City carried in 1886 nearly 59,000,000 people. In 1890 they carried over 72,000,000, in 1896 more than 94,000,000, and, in 1906 about 140,000,000 people.

In 1890 the population gathered within a circle of nineteen miles radius, with City Hall, Manhattan, as the center, was 3,326,998; in 1900 it was 4,612,153, and five years later it was 5,404,638, an increase in ten years of 38 per cent. In 1913 it is estimated that the population of this territory will approximate six million people, and in 1920, eight million.

These startling figures, and what they meant in transportation needs, in addition to the serious problem of providing corresponding freight facilities, were considered when the Pennsylvania Railroad was contemplating entering New York City.

A description of this vast improvement is incomplete without figures showing just how enormous it really is. The area of the station and yard is twenty-eight acres, and in this there are sixteen miles of track. The storage tracks alone

CONDENSED INFORMATION ABOUT THE NEW PENNSY TERMINAL IN NEW YORK CITY.

Area of terminal (Tenth Avenue to normal tunnel section east of Seventh Avenue,) 28 acres.

Length of trackage, 16 miles.

Number of standing tracks at station, 21.

Length of platforms adjacent to passenger-trains, 21,500 feet.

Number of passenger platforms, 11.

Highest point of tracks—below sea-level (M. H. W.), 9 feet.

Number of baggage and express lifts, 25.

Length of baggage express trucking and pipe subways, 5,200 feet.

Weight of street bridging steel, 23,500 tons.

Weight of station building steel, 27,000 tons.

Weight of steel in service building, 2,437 tons.

Total excavation required, 3,000,000 cubic yards.

Length of retaining walls, 7,800 feet.

Number linear feet of streets and avenues carried on bridging, 4,400, or an area of about 8 acres.

Dimensions of passenger station building: 784 feet long, 430 feet wide; average height above street, 69 feet; maximum height above street, 153 feet.

Dimensions of main waiting-room, 277 feet long, 103 feet wide, 150 feet high.

Dimensions of concourse, 340 feet long, 210 feet wide.

Concrete required for retaining walls, foundations, street bridging, and substructures, 160,000 cubic yards.

Loading per square foot on avenue bridging, $1\frac{3}{4}$ tons.

Maximum loading per square foot on bridging east of Seventh Avenue, 5 tons.

Number of columns supporting station building, 650.

Greatest weight on one column, 1,658 tons.

Number of buildings removed on terminal area, about 500.

Number of electric lights, in terms of 16 candle-power lamps and enclosed arc lamps in passenger-station building—arc, 532; incandescent, 21,951—about 30,000.

Maximum capacity of all tunnels in trains per hour, 144.

Storage capacity of station yard tracks, 386 cars.

Proposed initial daily service of Pennsylvania Railroad trains, 400.

Proposed initial daily service of Long Island Railroad trains, 600.

Length of river (tube) tunnels (single-track miles), 6.8 miles.

Length of land tunnels (single-track miles), 6.8 miles.

Total length of track in tunnels, exclusive of yard tracks in station, 16.5 miles.

will hold 386 cars. The length of the twenty-one standing tracks at the station is 21,500 feet. There are eleven passenger platforms, with twenty-five baggage and express elevators. The highest point of the tracks in the station is nine feet below sea-level.

The station building is 784 feet long and 430 feet wide. The average height above the street is 69 feet, while the maximum is 153 feet. To light the building it will take about 500 electric arcs and 20,000 incandescents.

More than 150,000 cubic yards of concrete were required for the retaining walls, foundations, street bridging, and the substructure. There are 650 columns supporting the station building, and the greatest weight on any one of these is 1,658 tons.

The river tunnels leading to the station are, all told, 6.8 miles long, and the land tunnels have the same length. From the Bergen Hill portal in New Jersey to the Long Island entrance of the tunnels it is 5.3 miles. It is 8.6 miles from Harrison, New Jersey, to the station in New York, while from the latter point to Jamaica the distance is 11.85 miles.

The maximum capacity in trains per hour of all

of the Pennsylvania tunnels is 144, and the proposed initial daily service will consist of about 600 Long Island Railroad trains and 400 Pennsylvania trains.

The stone work of the station, covering some eight acres of ground, was completed on July 31, 1909. To inclose this vast area has necessitated the building of exterior walls aggregating 2,458 feet—nearly half a mile—in length, and has required 490,000 cubic feet of pink granite.

In addition, there have been utilized inside the concourse 60,000 cubic feet of stone. A total of 550,000 cubic feet of "Milford pink granite" have thus been utilized in the construction and ornamentation of this building. It took 1,140 freight-cars to transport these 47,000 tons of stone from Milford, Massachusetts.

In addition to the granite, the construction of this building has called for the use of 27,000 tons of steel. There have also been set in place some 15,000,000 bricks, weighing a total of 48,000 tons. The first stone of the masonry work on the building was laid June 15, 1908; the entire masonry was thus completed in approximately thirteen months after the work was begun.

ON SHORT TIME.

BY HORACE H. HERR,

Author of "Being a Boomer Brakeman," and "The Evolution of 'Almost.'"

Bartholomew E. Goldsworthy Holds the Mail Contract in One Hand and Cupid in the Other.

CHAPTER VI.

Through the Cañon.

BART GOLDIE remained in San Francisco long enough to have hatched out a whole incubator full of railroads. He had been absent from the adobe hotel for almost three weeks, when Shorty Thomas, who was anxious to go down to Phoenix and help run the government, had to lay off from the west local to mend a section of his political fence, which had been rudely knocked down by some of the Mormons over near Snowflake, and they called me to take out the pedlers.

If Shorty Thomas had had as much of a cinch running for office as he did running that west-end local, he would have been President of the United States by now.

Shorty was about the only fellow who could run the local and get over the road without losing his rights. He was so small he could slip in where another fellow couldn't put his feet.

He had a way of jumping across the division ahead of a passenger, running as second section to the limited and several other little things, which, while they were not according to the standard book of rules, got him over the road in a space of time that made a big hit with the old man, and made some of the rest of us who claimed to be speedy look like a train-load of funerals.

On that local a fellow had to do everything from rebuilding a box car to digging rock out of the Sunshine quarry.

There were half a dozen water-cars to be filled at Angell, coal to be put on the chute at Winona, three cars of steel to unload near Cliffs, a quarter of beef for "Pap" Volz at Cañon Diablo, five cents' worth of pepper,

and a can of corn for the female mayor at Moqui, the blind-siding report to be made out, and the switching at the lumber-mills.

When I got to the other end of the division I tied up for six hours' rest, and when I got back to Winslow there were gray hairs in my head; and Bennett was in the hospital, suffering from old age.

They said it was typhoid-fever, but I couldn't make myself believe it. The fact is, I always had my doubts about his being sick at all, for every time I went over that way I found him sitting up in bed, talking a blue streak to Miss Fowler.

At any rate, when I returned from the trip on the local Bart had returned from San Francisco. I found him packing his belongings when I entered the adobe, and I felt sure that it was all off. He had received his walking-papers, or had asked for his time.

"Now, what's up?" I asked as soon as I realized that he was packing his trunk.

"I'm going to the mountains for my health," he replied.

"Quit or get canned?"

"Neither," he answered.

He seemed as willing to talk as a man with the lockjaw. As I had been twenty-two hours on the road, I didn't feel like coaxing him very much.

"Well, you might tell a fellow what's in the air," I remarked rather peevishly.

"Nothing particularly. The management of the road has decided that it must have that mail contract at any cost, and I'm going to fix it so they can get it."

"But it's too late now," I volunteered.

"The present contract is only for a year. Sort of a probation affair. It will be open to competition again next year, and by that time—"

Bart found difficulty in getting the lid down on the trunk, and forgot to finish.

"By that time, what?" I asked.

"By that time we will have rebuilt enough of the road to make it possible to make better time from Albuquerque west than any other road."

"So you convinced Mr. Ellington Wallerheit Smartley, advisory engineer, of San Francisco, U. S. A., that he didn't know much about track-building, did you?"

Now, I'm a perfect lady, and I refuse to repeat what Bart said about Mr. Smartley.

After touching briefly but firmly on Mr. Smartley's personal appearance and his lack of brain-matter, Bart inadvertently remarked:

"I suppose it's a fight to the finish between he and I. Old man Martin probably figures that he will have to take care of him some day, anyhow, so he keeps him on the pay-roll. Martin had better watch out, or he will rob him of something else besides his daughter."

Then Bart rather regretted his words and went to kicking the varnish off the trunk-lid, until he finally forced it down in place and locked it.

"But where are you going now?" I asked.

"Over to the Forks. I am going to meet Mr. Martin there to-morrow. He is bringing several experts out from San Francisco, and we are going over the route along Johnson's Cañon.

"If they are convinced that I know what I'm talking about when I say we can cut off fifty-three miles by building the road along the left side of the cañon, I'll make my headquarters at Supai and start to work at once."

Of course, I didn't say much to Bart about the proposition. I needed sleep, and the few remarks which Bart made about Smartley convinced me that, while Bart may have convinced every one that Smartley didn't know much about railroad building, he had not been able to stop the San Francisco man's campaign for Lois Martin's hand.

I knew that if it came to a choice between winning Lois Martin and building a piece of railroad among the eagles' nests, that Bart would have taken the girl.

Bart wasn't blue. I could hardly call it that. He was a bilious black. I sure would like to know what really happened in San Francisco while he was in there.

Did he ask the girl to marry him and get an order to run on, light? Did he see Smartley breaking into the family?

It must have been something pretty strong, for when he came back he wasn't the same Bart exactly; and the feeling which had taken possession of me the first time I met him returned.

He would say "No," or "Yes," and it would sting more than all the abusive language a drunken sailor could hand out in an hour's time. Every one under him found him a slave-driver. I don't know just what it was, but it seemed to me that he had locked every one out of his life.

He had determined to build that fool piece of track down Johnson's Cañon, and he was going to build it. He became reckless in his work; not that he neglected a single detail in a job, but when there was a chance of any one being hurt in doing some of the work, Bart was always right at the side of the man in danger, whether it was an Indian laborer or a white man.

He went over to the Forks, and I would only see him once in a while when he happened to be about the station when I went through, or when he would climb onto my train and ride over to Supai. I couldn't get much of an idea of what was going on.

The agent over at the Forks told me that the general manager, the superintendent, and two other fellows had left the Forks one day with Bart. They had been gone two days before they returned.

He didn't know what the deal was, but he said he heard the general manager tell old man Arnold the morning the former returned to San Francisco that "Mr. Goldsworthy knows what he is doing, and we will just put him in charge of this work, and get another roadmaster."

About one week after that I saw a bulletin on the board down at the despatcher's office which said that Erick Andersen had been appointed acting roadmaster vice "Bartholomew E. Goldsworthy, assigned to other duties."

I began to wonder if every one along the pike had gone crazy. To think that sane men of business would allow Bart to convince them that he could build a railroad down Johnson's Cañon.

It got to be a joke on our road, and it was such a good joke that it spread to other roads. I understand several experts from the S. S. and T. went over and took a look at Johnson's Cañon, and went home to laugh the rest of the year.

I understand that old man Arnold said it couldn't be done, General Manager Martin said he hoped it could, Smartley said it was

the evidence of an unbalanced mind, and Bart was the only man on the whole road who said it could be done, and be done within a year.

I don't know how he convinced them, but he did; and when I pulled three cars of hydraulic drills and other machinery out of Winslow one night, billed to Supai, and caught a car of blasting powder in the same train, I couldn't help but recall the fact that Bart Goldie had said: "We will build that piece of road some day."

I had to admit that the Hon. Charles Flynn was pretty near correct when he remarked that "it hain't safe to say nothing can't be done any more, for nine times out of ten a fellow don't get the words out of his mouth until some fellow comes along and makes him out a liar by doing it."

Reports kept coming down from Supai Mountain regarding the work, and some of them concerned Bart directly. It was said that they had let Bart down over the precipice of the cañon on a rope to start out with, and that he had worked a half-day there, hanging between heaven and earth, trying to dig a hole in that ledge of rock with a cold-chisel and a hammer.

In another week I heard that he really had dug the hole, and it was now so big that several men could stand in it. Then I heard that a Mexican had slipped from that shelf of rock, and that when he hit the bottom of the cañon there wasn't enough left of him to bury.

All the time, however, more machinery went by billed to Supai, and there was enough blasting powder set out there to have blown the Rocky Mountain range into the sea.

I heard it said that Goldsworthy never went to sleep; that he was on the job all the time, as cross as a bear with a sore ear; that he would fire men for the most trivial violation of orders—and I heard enough other stuff to make me sit up nights trying to solve the puzzle of one Bart Goldie.

Then I had other troubles, too. That grinning face of Bennett's kept hanging round the hospital. He stayed there for six weeks, and never showed a sign of leaving. He got to the point where he could wobble about the veranda, and a couple of times I caught him talking to Miss Fowler. I just made up my mind to tell Miss Fowler what a good-for-nothing, mean-dispositioned fellow he was.

I went over there one evening, and found them sitting out in the moonlight. That

showed that Bennett wasn't sick, for moonlight is dangerous to a sick man. I walked right up to them, and with all the dignity I could command I began:

"Miss Fowler, I have an important matter of business to talk over with you."

I said it that way because I wanted Bennett to know that Miss Fowler and I were associated in certain affairs.

"Indeed! How unusual," she says. Then she turned to that grinning, freckled-faced fake, and asked: "Would you excuse me for a few minutes?"

The idea of Miss Fowler having to ask him to excuse her!

We walked around to the other side of the hospital, and I got out a search-warrant for something which resembled "an important matter" to talk about.

"Is Bennett running this hospital, or just living here?" was the best I could do.

"What a foolish question," she replied.

"Well, he's been hanging around here for almost two months now—"

"He has been a very sick man," she interrupted. "There was a time when I was afraid he wasn't going to get well."

"You seem to worry a good deal about him. Now, that hospital is no place for you, and—er—that is, you—see—" I didn't know just what to say next, so I shut up.

"Yes, I see," she volunteered. "It's a beautiful night, isn't it?"

Not knowing just what to say, I admitted that it was.

"But the important business, Mr Murray."

"Oh, yes! I had almost forgotten about that," I answered, just to let her know that I wasn't tongue-tied.

"I'm going to be called about midnight, and I understand that I'm going to be cut out at Supai for a work-train on the cut-off. I may be out there for several weeks, and before I go I just want to tell you that I—er—that is, I don't like this work-train job. It is—"

"Why don't you tell the trainmaster?"

"I'm going to, Miss Fowler. That's just what I am going to do. I'm going over and quit the road and leave the country."

"Oh, you're not going to do that, Mr Murray. It wouldn't seem like home without you here."

"Honest?" I said, feeling like an aeroplane just two minutes before it leaves the ground.

"Yes, indeed. I should miss you a great deal."

"All right. I won't go."

"Oh, that's a dear!" she exclaimed, and just then the aeroplane left the earth and went skipping from cloud to cloud. I was so busy holding on that I can't recall much of the conversation from that time on, but there were several remarks regarding double-heading for life, and I asked her to be one of the engines.

Then I felt a sinking sensation; the flying-machine started down, and it's a wonder I wasn't killed by the fall.

When I left the hospital that evening, I swore that just so soon as Bennett got well enough, I was going to call him out. I'd fight him with guns or brickbats at half a block, and ask no quarter.

I think I knew just how Bart felt when he came back from San Francisco, after having seen that fellow Smartley forcing himself on a poor, unsuspecting woman.

I wanted to be alone. I didn't have much conversation for any one. I went out and did my own switching, and let the brakemen sit around and swap stories. I rode the pilot-beam between stations, hoping that we would hit something; and when they cut me out at Supai, and put me on the work-train at Bart's new cut-off, I was glad of it.

There was danger there. I wanted to hang around it, flirt with it; and I didn't care if some one went right back to Winslow and told Miss Fowler what she had caused me to do.

If I could have been present, to see her look down on my mangled form and faint with remorse, I would have been willing to have been shoved off the shelf of rock where the men were working.

As I couldn't have the satisfaction of standing with her by my corpse, telling her that I had been a victim of her heartlessness, I decided to keep just as far away from the edge of that precipice as I could and live long enough to even the score with Bennett.

When I got down the mile of new track from Supai to Johnson's Cañon, I saw a sight that made me forget the sorrows of my miserable life.

I saw men hanging to the face of that cañon by their eyebrows, drilling into the rock. I saw a shelf cut out of the ledge wide enough for two tracks, if necessary, and a half-mile long. I saw reenforced concrete abutments built at either side of the cañon, all ready for the steel for a bridge which would carry the track over to that shelf of rock.

While that wasn't more than half that I

saw, it was enough to show me that building a railroad down Johnson's Cañon was a joke; but the funny end of the joke wasn't pointed toward Bart Goldie, who, by the way, was swinging out over a three-hundred-foot hole in the ground, riding the first steel girder to its place on the abutment on the far side of the big crack.

It made me dizzy to look at him. I couldn't help but think what would happen if that thread of cable, which held over a thousand pounds of weight, should break. It made me feel like putting my tail between my legs and crawling away back under the barn.

I never worked so hard in my life as I did on that one mile line. The crew helped a little in the unloading at the cañon. I lived in mortal fear that a percussion-cap or a few sticks of dynamite would blow us all over into the next county; but these little things kept my mind off Bart during the day, and, in their way, were a blessing.

Bart and I were together every evening again. It was a case of misery loving company, I guess; for we got along fine, he never mentioning his troubles and I never intimating how my young life had been blighted by a fickle woman.

I don't know that it was the similarity of our hidden grief, but, for some reason or other, I began to really understand Bart Goldie. It is a fact that he was a slave-driver and all that, but he had to be.

I heard him state his case to Superintendent Arnold one day, when Arnold came down to look over the job, and ordered a Mexican to knock out a prop which seemed to be in the way of one of the little tram-cars operated on the shelf of rock.

The Mexican started to obey, and Bart fired him on the spot. Arnold explained that he had ordered it, and Bart told Arnold the following very plain story:

"Mr. Arnold, I'm in charge of this work. If I fail, my reputation is ruined—that to me is a great deal. If I fail, your company will have wasted over ten millions of dollars—that should be a great deal to you. No man gives orders on this job but me. It's a case where it must be so for the protection of the men. One false move like that might cost a dozen lives. All the men have their orders. This Mexican had his, and there is no excuse for his having violated them. If you want to give him work on a section some place, that's your affair."

The old man chewed that over for a few minutes and swallowed hard.

"You're right, Goldsworthy. Your right," he said, and from that day on if there was an order to be made, Bart made it.

Any one could make suggestions to Bart, but no one could order a man to do so much as pick up a shovel. Superintendents, train-masters, master-mechanics, and even General Manager Martin, looked like common folk to Bart; and every one of them was willing to have it that way, except Ellington Wallerheit Smartley. I have an idea that Martin kept Smartley locked up in his San Francisco office until the work was so far advanced that he could cause no consequential delay.

Rome wasn't built in a day, nor did Bart build his railroad down Johnson's Cañon in a month. Fortunately for the A. and P., the trial for the mail contract was delayed for some cause or other, and it was eighteen months before the A. and P. received notice that the government was ready to have them show what could be done. The management of the road conferred with Bart to find out when the cut-off would be completed, and he said four months more, if he had plenty of men and good luck. The road furnished the men and Providence the luck, and every one did his part except Smartley.

After Bart had the work well under way on the east end of the cañon, he started another gang in at the west, and they worked toward the center, where he had planned to tunnel for a half-mile.

The work had been going on for almost a year, the tunnel had been started from the east side, the big steel bridge across the cañon at the east had been put in, and when Bart received notice that the speed trial for the mail contract would be made in four months, his men had several hundred yards of the tunnel completed.

With the cut-off, the situation was this: The main line from Supai had wandered away to the south, and wound about the bluffs and cañons, working west at every opportunity to the Forks. It followed just such a course as a stream might follow—the line of least resistance.

The cut-off left the old main line at Supai and went directly west for a mile to where it encountered Johnson's Cañon, which came down from the north and turned sharply to the west for four miles; then it went south for a mile and doubled back to the north, leaving a spear-head of rock between the southern and northern course which was about one-half mile wide at the base.

Fortunately, the cañon resumed its way to

the west in a direct line with its course before it ran off to the south. Five miles beyond, the left side of the cañon fell away so that the right-of-way came out on the surface again, and continued due west into the Forks.

By the cut-off, the distance was just twelve and a half miles from Supai to the Forks, where, before, it had been sixty-five.

The rails had been put in from Ash Fork as fast as the road-bed was cut out. The same was done from Supai; and, with two months more to go on, Bart finally had both gangs working on the tunnel.

I was the first conductor to run over the new track, and Denny Reagan, with his half-moon grin, was the first engineer to open a throttle on the big shelf. It looked as if we were going to beat Bart's time by thirty days, until Smartley appeared on the scene.

It was an evening late in August. The Mexican and Indian laborers had just cut off work, and were piling onto the work-train to ride back to Supai to their bunk-houses and beans.

Bart and I were standing near the engine, talking, when I looked up the track. About two hundred yards away was the bunch of clothes and a walking-stick, close in against the face of the precipice, coming toward us.

"A friend of yours, I believe," I said to Bart.

He looked up. When his eyes fell on Smartley they narrowed to mere slits, the muscles over his jaws came up in lumps, and that undershot jaw of his set with a click like a bolt slipping into place in a burglar-proof vault.

I just had time enough to bet myself a box of clear Havanás against an omelet pie that there was going to be trouble when the big noise from San Francisco came up juggling that one eye-glass of his. He said:

"Ah, Mr. Goldsworthy, I've been looking for you for several hours, y'know. Deucedly dangerous piece of track this. I should think you would let your sub-foremen look after the details, y'know."

CHAPTER VII.

In My Little Crib Again.

BY consulting the hieroglyphics in my train-book, I find that on August 25, I had in twenty-five days on the work-train and sixty-two hours overtime, which, I

think, goes to show that, if Miss Fowler thought I was going to mope around grieving over the way she shoved me onto a blind siding, she didn't fully understand the nature of the brute.

If she had known that I was just hoping that she would marry Bennett—but then it wouldn't be quite right to say that, so I won't.

But, getting back to the main line, my train-book shows that it was August 25 when Smartley made his appearance on the scene of action. But thirty days remained until the speed trails for the transcontinental mail would start from Chicago.

A blind man could see that it was going to be a close shave; and, although Bart insisted that the mail-train would run over the cut-off, there were many who expressed more than a doubt about it.

One night I dreamed that I had just fallen off the ledge. I had a great trip going down, bouncing from pebble to pebble, and finally landing in a sitting posture on a bed of cacti. The tickling sensation on alighting woke me, and I found Bart sitting at the old dry-goods box, studying a blue-print.

I looked at my watch, which was under the pillow, and it was three o'clock. I don't know if Bart was up again or yet. Regardless of the sleep question, Bart told me that he would be in the clear for the big mail special, barring accidents—but he didn't figure on Smartley.

General Manager Martin must have grown a little nervous, for on August 25 his car was set out at Supai; and when Bart and I got in that night, bringing Smartley in with us, there was a conference in the private car.

When Bart returned to the bunk-house, he told me that Martin was going to remain right at Supai until the work was finished. He didn't tell me that the entire Martin family was in the car; but I found that out the next day, when I saw Smartley piloting Miss Martin over the new piece of track down to where the work was going on at the tunnel.

I couldn't help but notice that the walking-stick and the eye-glass was on the inside next the precipice, with Miss Martin on the side nearest the edge of the cañon; and I couldn't help but think that that would be about the same way that freckled-faced Bennett would protect a lady in a dangerous place.

Of course, I had more to do than stand around and watch Smartley as he showed

Miss Martin what a wonderful piece of track he was building. Bart was putting heavy steel arches in the tunnel just as rapidly as possible. When the couple arrived on the scene, I was just starting back to Supai with the work-train to bring down a load of this steel.

I don't believe I was gone more than an hour, but I got back just in time to see enough of the show to lead me to believe that it would have been worth the money to have seen it all.

Bart was coming out of the mouth of the tunnel. He had Fido by the collar. Fido's one glass eye was out of place, and his silk stack was running off toward Jones. He was sure walking Turkey. About twenty feet from the tunnel Bart let him go. I didn't need an ear-trumpet to hear what he told him, although I was a good three car-lengths to the windward.

"Now, Mr. Smartley," Bart remarked in a voice as soft as the rough side of a coarse file, "if you have any further doubts as to who is running this job, you might take the matter up direct with Mr. Martin. I have no time to argue the question. If you follow the track it will take you to Supai, and if you come below the trestle again without a guardian I'll not be responsible for what happens to you."

Smartley took off up the track like a yellow cur with a tin-can running mate on a fast schedule for the dark spots under the back porch.

Miss Martin had followed the two men from the tunnel, and I rather thought she enjoyed the show as much as I did. Bart was mightily embarrassed, though. He turned to her and raised that greasy lid of his from his head. As I had made it a point to get a little closer to the scene of action, I heard him say:

"Miss Martin, I can't tell you how I regret this little episode. You will not understand I am afraid, because you are not familiar with the class of men I have to deal with. I have to rule here."

"No apology is necessary, Mr. Goldsworthy," replied the young lady in a way that was noncommittal.

You couldn't tell whether she was angry or pleased.

"Indeed, an apology is necessary, but it would take a great deal more time to explain than I can take right now. If you would permit it, I should be glad to make my apologies this evening after I get back to the camp. In the meantime, I must in-

sist that this is entirely too dangerous a place for you."

"And you?"

Aeroplanes and balloons again. It made me think of the time that Miss—but, then, that was all past, so what's the use to bring it up again.

"Oh, it's part of my work, Miss Martin," and with that Bart dismissed the subject. He called me over, and it was then that I was formally introduced to Miss Martin. After the introduction, Bart continued:

"Mr. Murray, I want you to help Miss Martin onto the engine, and see her safely back to Supai."

"But I want to see what you are doing in that tunnel, Mr. Goldsworthy. Really I do."

"I'm sorry that it is impossible," he replied.

"Please take me in. It would be safe if you were with me."

"If a woman like Miss Martin talked that way to me, I would give her anything she wanted. Why, when Miss Fowler asked me—but what's the use?"

Bart wouldn't stand for it. The best Miss Martin got was his promise to take her over the entire piece of track just so soon as he considered it entirely safe. With that, he walked over to the engine with us, helped the lady up into the cab, and for once Denny Reagan started off like a gentleman.

I was much obliged to Denny for running so slow. It gave me a chance to talk to the general manager's daughter. I wish Miss Fowler could have seen us two setting up there on the fireman's seat.

Miss Martin asked me why Bart would not allow any one in the tunnel except the workmen, and I felt called upon to paint for her a graphic picture of cave-ins, premature explosions, and a few other little things which hadn't happened up to date. I also dwelt on the number of victims who had been sacrificed in the building of the road. I let her know that Mr. Bartholomew E. Goldsworthy was the man who conceived the idea of building the cut-off, that he was the man who had built it, and that in more ways than one he was a greater man than he looked.

By the time we got up to Supai, Miss Martin wasn't talking very much, and there was that day-after-to-morrow look in her eyes. She wasn't seeing much of the landscape.

She didn't see Smartley when we most frightened the life out of him, as we passed him. He edged up against the rocks so tight

that I wouldn't be surprised if you could find his imprint there yet.

A week went by, and Smartley did not appear in the vicinity of the tunnel. Bart saw him every evening at the conferences in the private car, which had become a daily occurrence; and one morning, when I was loading a flat with steel beams, I saw Smartley, Miss Martin, and her mother starting out for a little stroll up the mountain. That night the private car went over to Williams, and it was almost a week before it was brought back and set in on the spur again. When it did return, General Manager Martin sent a messenger for Bart. After the conference an extra gang of laborers were ordered down to the tunnel from the section just above Supai.

We were on short time, sure enough. Everybody was predicting that the tunnel would not be through within a month. Of course, I listened to all the straight tips I heard, and then I went to Bart with them and asked him to give me his best guess on it.

Bart got out a blue-print. By standing on my head and looking cross-eyed, I was almost able to make out what it represented. However, Bart knew just what it was, and he demonstrated to me that there was only one more week's work for a few able-bodied men, and the tunnel would be in shape so that it could be used.

There would be a few little things to be done after that—putting on the final coat of varnish, hanging the mottoes at the entrances, and the like; but when Bart got through explaining, although I didn't quite understand some of the figures carried out to the sixth decimal place, plus "X" over "Y," I just went out and added up how much I had bet on the game so far, and doubled it.

I was betting a hundred dollars to a bean. I couldn't help but feel sorry for the Mexican inhabitants; for if I won, and demanded quick payment, I would have had the bean crop of the United States and Mexico sewed up in a sack and a call on the futures for five years to come. Then the bears got busy, and I came near going broke.

When they brought that extra gang down from Supai and put them on the job, Bart made a mistake. There was one fellow who had a large scar on his head. Bart should never have allowed him on the premises. It was the same gentleman with whom Bart was having the little argument that evening at the Cinder Pit when I first met the new

roadmaster. If Bart had forgotten him, the Mexican had a better memory.

I suppose the court would rule that my testimony, being based on hearsay, should not be put on record, but my source of information was the Mexican saved from drowning in Cosnino Creek by Bart Goldie; and though what I say now might not influence the court, what he told me direct certainly made a strong case in my mind.

When Bart and I went to work that Friday morning, Bart was in great spirits.

"I'll show you an imitation of a real day's work," he remarked, just as if getting up in the morning so early that he met himself going to bed the night before wasn't enough evidence that he was doing a real job of work.

When he got down to the tunnel he made things fly. It was about ten o'clock. Bart was in the tunnel. The extra gang was doing some minor work at the east entrance of the long hole, and as we had all the steel—even the rails which were to go into the tunnel as fast as it was cleaned out—down to the spot, I had little to do.

I had never watched the operations at the head of the excavating, and I wandered down into it until I found Bart. I thought I would get a few dollars' worth of sight-seeing, provided Bart didn't take me by the collar and march me out, as he had Smartley.

I must have been in there about an hour, when we heard a yell. It wasn't much of a yell at that. Sounded as if some one had stepped on a setter pup's tail. With the tunnel walls to hold the sound in, the effect wasn't just exactly pleasant.

Bart and I were down at the head of the drive, more than a quarter of a mile from the east entrance. We both heard the yell, and Bart started to go back and investigate. Then came another yell. It sounded to me like some one calling: "Goldsworthy!"

The floor of the tunnel came up and hit me in the face. I felt an awful pain in my ears, and, being badly in need of rest, I went off to sleep.

I don't know how long I slept there on that rock floor—quite a while, I guess; for when I came to, Bart was kneeling over me, a torch was burning near on the tunnel floor, and if the yell I had heard before I went to sleep was creepy, the chorus of vocal noises that greeted me when I came to would have been a credit to a train-load of snakes.

"How do you feel?" asked Bart.

"All right," I replied. "What's happened?"

"Cave-in about a hundred yards inside the mouth of the tunnel. Can you walk?"

"Walk! Well, say, show me the way out, and you won't be able to catch me with a race-horse."

Bart helped me to my feet, and as he stooped over to pick up the torch, he remarked:

"That's where the rub comes in. There is no way out until we dig one."

There was Bart, there I was, there was a dozen Mexicans and Jimmy Dugan and his boys who had been working the drills, and—there we all were.

To the west, the tunnel ended in a solid wall of native stone, which, according to Bart's figures, could hardly be tunneled through by the men working from the west inside of four days; and back toward the entrance we were blocked by the cave-in—tons and tons of rock, just how much I wouldn't venture a guess.

We took the torches and went back to the cave-in. Bart inspected it as if he was looking for a diamond, and I sat down on a generous chunk of stone and hoped that some one would tell Miss Fowler that she had driven me to this miserable fate.

The Mexicans put in their time in a marathon race from the cave-in down to the head of the drive and back, and then over the same route again.

It would have been a great race if half of them hadn't collided with the other half in making the turn. As it was, I can't imagine anything that would produce the same effect up and down a man's spine as did their wailing and yelling, unless it is a curry-comb.

Bart endeavored to quiet them, but one of them refused to be quieted. Bart grabbed one of them by the collar and shook him, and then pushed him aside. He stumbled over a stone and sank down in the tunnel, to lie there sniveling and talking Mexican to a certain saint. I tried to repeat it after him, but before I had it learned Bart called to me, and I had to join the boys at the cave-in.

"Baldy," began Bart in the same reliable tone of voice, "guess we will have to dig our way through this. They will be working from the other side, and what we do from this end will just help that much."

"Yes, Bart," I replied; "but what can we do?"

"Pull these rocks back! Break up the big ones! Dig out! Come, Dugan, let's get the sledges and the shovels!"

He and Dugan started back to the head of the tunnel, and I went along, because I didn't care to be left alone with that Mexican who was still moaning.

We got the sledges and the shovels, and started to work. It was slow and nerve-racking. Bart didn't have much to say; Dugan said less; and I couldn't have made a vocal noise if I had to. We just worked.

Finally a few of the Mexicans grew calm enough to join us, and after we had been working a couple of weeks you could almost tell where we had been digging. In about a month we had made a little headway. I began to feel quite cheerful, for it looked as if it would only be a few months more until we should clear a way out.

Of course, I am used to eating once or twice a week, whether I'm hungry or not; and after we had been in there for some time I began to feel mighty weak.

I guess we had been in there a year—leap year, at that—when I saw the grinning, freckled, green-eyed face of Bennett looking at me from behind a rock, which wasn't there when I hit at it with my sledge-hammer.

Just the same, when I hit at the rock, Bennett ran, and I threw the hammer at him. Then I sat down and began to wonder who would take care of Miss Fowler. The torches began to dance about, the blaze seemed dying down. I wondered what had become of the Mexican and his saint, and then Bart Goldie took me by the shoulder, shook me until my bones rattled, and held the torch down so close to my face that I almost took a bite out of the flame.

Bart looked awful big right then. I couldn't see up as far as his head, and his voice sounded as if it was coming from the top of Bill Williams Mountain and I was down a well at the bottom.

"Baldy! Baldy!" he began; and about seven hundred devils in the dark tunnel began to bark, "Baldy! Baldy!" at me.

"Brace up, Baldy; I can hear them pounding on the rock!"

"That's just Bennett knocking me down at the hospital," I replied.

Bart went away, and left me to think of the big supper Miss Fowler and I had that evening at the Harvey House. Once I looked up, and there was Bart still swinging that sledge; his torch was sitting up on a boulder at his side. Dugan had gone. I suppose he ran off with Bennett.

Finally, I remembered I wanted to tell Bart about the pay-checks which were deposited in the Winslow Bank. Of course,

they wouldn't be of any use to me; and as Miss Fowler was born in Kansas, and I passed through that State once, she was about the closest kin I had. I wanted Bart to see that she got them, but I didn't want her to spend them on Bennett. I staggered over to where he was, and I made him stop work long enough to hear my story.

"Bart Goldie," I began, "I've got a few thousand dollars down in the Winslow Bank, and I must have about seven billion dollars bet that you will finish this tunnel in time for the mail special. When I win that money, you just collect it and—" and then I quit.

Rather, I was brought to a full stop. I didn't know that I had been punctuated with a period for about twelve hours later. I woke up to find myself in the little crib with the fussy covers, looking straight into the eyes of Miss Fowler. I knew that I was still playing groundhog after having seen my shadow. I was wondering if I would hit a cloudy day the next time I heard her voice.

"Mr. Murray, are you awake?"

You know, I didn't dare tell her I was, because I wasn't sure.

"I don't know. Am I?" I said.

Then I heard her laugh, and I opened my eyes again, and, durn me, I was awake. Right back there in that good old hospital, with Miss Fowler waiting on me again. Then I began to remember things.

"Where's Bart Goldie?" I almost shouted.

"He is over at Supai tunnel."

"And where is Dugan?"

"He is over at the tunnel, too."

"Both of them all right?" I asked, wondering how such a thing could be possible.

"Both of them all right," she replied.

"And what's the matter with me?"

"You," replied Miss Fowler. The prettiest red I ever saw came creeping into her face, the merriest twinkle I ever want to see came into her eyes, and the sweetest smile I ever expect to see came onto her lips. "You, Mr. Murray, have been affected with a chronic case of talking in your sleep."

Just then the aeroplane started up again. Its gentle motion made me dizzy, and I went back to sleep.

CHAPTER VIII.

Wedding-Bells.

THERE are people who just stand around waiting for a chance to join the anvil chorus or sing the "I-told-you-so" solo.

These people never do anything worth mentioning except criticize a fellow who tries to do something worth while. When the news of the cave-in spread over the division, there were those who were ready to tell you that Bart Goldie was an imbecile, that he didn't know the first principles of tunnel-building, that any one with so much as a cinder of brains should have known that the top of that tunnel would fall in.

To a man up a tree—or, more properly speaking, to a man in a little white crib—there were certain things about the accident that had a smoky color to them.

I can't remember Bart saying anything about there being a possibility of a cave-in. He told me that the only thing he wanted to be careful about was premature explosion of the dynamite used in blasting. While I didn't have a chance to look over the ground until after the tunnel had been completed, I had a source of information which placed me in possession of a few facts. While they were never made public, they finally reached the right party, and put an entirely different face on the whole affair.

That Mexican whom Bart pulled out of Cosnino Creek, a short time after he was made roadmaster, proved to have been the owner of that warning screech which Bart and I had heard just before the cave-in. It seems that while I was sitting there in the tunnel, trying to make an inventory of my good deeds so that I might have them indexed for ready reference should I be called upon to show my credentials, Bart had taken a body from beneath the rock which had fallen in.

That body and myself found ourselves occupying the same ward in the hospital; and while I, according to Miss Fowler, had only been troubled with a tendency to talk in my sleep; the Mexican was really in bad shape.

His head was battered in, one arm was broken, a few of his slats were cracked, and he was almost beyond the need of the rip-track; but Miss Fowler's nursing, assisted by the doctor's pills, brought him far enough back to life to enable him to talk. Before I came out of the hospital I had a story that made me sit up and take a little notice.

The Mexican's name was Juan something or other. He told me that he had been carrying powder from the little powder-house to the tunnel for over a month. On the day of the accident he had passed Smartley talking to Romero García, who will be remembered as the man with whom Bart once had

quite a tobasco-sauce argument over at the Cinder Pit.

About two hours later, Juan Bean-eater, or Chili-chaser, saw García lighting a fuse which ran up the side of the tunnel about a hundred yards from the entrance. When Juan saw this his intellect, which had never shown signs of working faster than a slow walk, became wildly active, and it was his noise factory working at full capacity which had disturbed the dark quietude down toward the head of the tunnel where Bart and I were talking when the explosion came.

It seems that Juan, after going into the tunnel about a hundred yards beyond where he saw García light the fuse, decided that he would be unable to reach the men in time to warn them and get back to the sunlight, and he turned back.

He told me that he made just as fast time going out as he did coming in, but he didn't get by the charge of blasting powder. When the big works came off, some of the scattering rock caught up with him, and he came within an ace of being transformed into an imported porous plaster.

This little piece of gossip interested me; but there was another trifling item of news for which I yearned.

A friend loaned me a novel once, entitled "Mabel's Other Husband; or, Who Drew a Lemon?" I started to read it by the light of my lantern one night when I had a drag of black marbles over the third division. I got so interested in that classic that I forgot to put up coal at Winona and failed to pick up my water-car at Angell. When the hog-head began to yell, I sent the brakeman over the tops to find out what silly question was on his mind.

When the rear shack came back and said we would have to run for water, I was just at the place where Mabel's other husband had arrived in South Dakota and was about ready to prove his final decree, and I wasn't going to delay the game, so I just sent word over for the eagle eye to run for water just as far as he liked.

By the time the engine came back to the train and the rear brakeman had been called in with the flag, I had reached the chapter in which the detective with the sandy beard had found the proofs and was about to show who drew the lemon. When I turned the page, I found that some one had torn out the last few chapters, and, so far as I know, Mabel still has her other husband and the other one too, and the other husband and the other one both have the lemon.

It was the most unsatisfactory book I ever read.

I and my headache had been keeping company for about a week, when Miss Fowler came in, one afternoon, all excited.

"The tunnel's finished," she whistled, as she came alongside my little cradle, "and the mail special leaves Albuquerque to-morrow night. Your friend Mr. Goldsworthy is coming into Winslow to-night."

"Anybody coming with him?" I asked.

"Every one—that is, all the other officials, Mr. Arnold and Mr. Martin and the rest of the party."

"And Fido, the one-eyed poodle?" I asked.

"And what?" she answered.

"Excuse me, I refer to Mr. Ellington Wallerheit Smartley, advisory engineer for the Western lines, once of San Francisco, now of Supai. He is the gentleman with the half-grown crutch and the lone window-glass."

"Oh, hadn't you heard about him?"

"Haven't heard anything to speak of since the explosion."

"Well, Mr. Murray, there is something mighty queer in that man's actions. He left for San Francisco the evening after the accident at the tunnel. He didn't wait to see if they reached you poor men. He went right back to Supai and caught the evening passenger."

This evidence was being considered by the detective with the red whiskers and the bald head when a step like a lame elephant sounded in the hall, and a voice like a steam callopie drifted into the ward.

If I was color blind, I would be able to tell that voice as far as I could hear it. Denny Reagan was in town, and for once I was sure glad to see him, for I felt certain that he had the missing chapter of my book.

Denny came into the room, bringing that Irish grin and his danger-signal nose with him. Denny was a mighty good engineer, but he wasn't much on grammar. He would say "hain't got" for "don't got," but after you knew him as well as I did, you didn't mind such little mistakes.

"Well," says Denny, when he got inside the room without cornering the door, "how's the biy?"

As Miss Fowler had left the room, I just talked as I felt. I wanted to know, once for all, whether I was a billionaire or a pauper.

"It's none of your business how I am, Denny. About all I want out of you is the exact story of what happened on the outside

of that tunnel during the four hundred and twenty-seven years Bart and I and the other animals were on the inside."

"Foirst down," said Denny, "come auld man Arnold, makin' a mile a minute, and about two train-lengths beninst him was Ginirel Manager Martin; an' whin they saw the lay-out, Arnold stays on the job—and Martin and me goes back to Supai to tiligraf fer the doctor and the nurse ter have thim on th' scene of garbage. Well, whin we got up to Supai, Martin rushes over to the varnished wagon an' tells the womin folks, and say—"

Denny had to stop and wipe his forehead with his handkerchief and shake his head. Then he popped off suddenly:

"What th' divil do you'se think? Th' ginirel manager's daughter—the wan with th' eyes like a fawn—well, you'se won't believe it, but she let out a scream that you could have heard clean down to Fairmount. Carry on? Well, I niver saw th' like. The only way the auld man could quiet her was to take her down to the tunnel."

It was real nice of Denny to tell me just the part of the story I wanted. Right there, I decided that Denny was a better engineer than I had give him credit.

"And thin—the waitin'. Be me soul, I've lived some long days mesilf, but none of them was as long as them two days while we was a tryin' to push half a mountain away wid a toothpick. The doctor got there, an' that woman wid th' stripes on—ah-ha! Th' wan what made a grab fer yes th' minit your dirty face come through th' hole in the ground."

"Now, Denny," I interrupted, "Miss Fowler is a perfect lady, and you must not associate her name with a common, misguided, rough-neck work-train conductor like myself."

"Ah, that's all right, me biy. That's all right. It's a priest you'll be needin' worse than a doctor."

"But return to the story, Denny," I said, endeavoring to guide him gently back to the real subject.

"Yis," resumed Denny, "gitting away from the vicinity iv matrimony an' back to th' accident. After Miss Fowler had glombed onto you, thin out comes the Mexican what, I understand, was almost punctured be th' fallin' rocks, and thin—"

"And then—" but Denny had to wipe his forehead again.

"Thin th' rest of th' greasers come out and that man Dugan what Goldie says is a

hero, and thin comes Goldie, with his hands bleeding an' lookin' like he'd bin run through a wringer."

"And where was Miss Martin, the general manager's daughter?" I asked.

"Well, Baldy Murray," said Denny, "I don't know where she was before Goldie came out, but after Goldie came out she was right where Goldie was."

Denny's amazement was the most natural thing in the world, for Denny has had no experience with women; but, to me, the announcement was just what I expected.

I would have liked to have heard more of the details, but Miss Fowler came back to the room just then, and informed Denny that the doctor had instructed that I should not be allowed to talk much for a few days.

"Sure," says Denny, "that's right. That man talked enough, after they brought him out of the well up there, to last both ye for a time."

While he laughed one of those gentle chuckles which sound like a boiler-maker tickling a flue-sheet with a sledge-hammer, Miss Fowler got awful red in the face, and I—well, I began to figure.

"You see, ever since the day Bart Goldie said he would build that tunnel, I had been betting with myself that he would; ever since he showed that he wanted that girl, I had been plunging that he would get her; and when I get to plunging, I play to the limit.

I was almost through figuring at ten o'clock that night when Miss Fowler came into the room to see if I was asleep. I didn't have the exact amount of my winnings, but I was sure that it was enough to keep two people in moderate comfort for the rest of their natural lives, provided one of them kept working regular—and I told her so.

"Are you asleep?" she asked, after I had finished.

"No, I'm not asleep," I replied; "and, what's more, I'm not out of my head. I just want you to know that—"

But what's the use. I never did feel so good in all my life.

The next morning, about eleven o'clock, I had callers. One of them was Bart Goldie, and the other was the best-looking woman in the world, barring one—Miss Martin.

Mr. Martin and Mrs. Martin were in the party, but they didn't count much, and left early; but Bart and Lois—that's just what he called her right to her face—remained, and talked to me for almost an hour.

None of us said very much; but, say, that room was so full of "looks" that you just couldn't keep in the clear for them. They were just ready to go when Bart stepped over to the bed and stuck out his hand.

"They tell me that when you fell to the ground from the force of the explosion, you came so near cracking your head that you weren't responsible for what you said, and my advice to you, young fellow, is to just repeat it all—now that you know what you are doing."

"I've got my fingers crossed," I replied, feeling like a sheep. "I've already said it, and it took."

"Then, while I'm congratulating you, Baldy, allow me to say that Lois and I are going to San Francisco on the mail-train tomorrow. It's to be a sort of honeymoon, you know, only it's to be before the wedding. We are going to put off the wedding until you are able to be the best man."

I got well so fast after that I was able to sit on the veranda the next morning and watch the mail-train pull out.

On the rear was Martin's private car, and the Martin family, including Bart. The mail-train had made a great record over the first and second division, for all the men had caught the spirit which had built that Supai cut-off and the big tunnel. At Bart's suggestion, Denny Reagan was given the job of pulling the mail-train over the third.

You don't need to take my word for it, but just go and look at the train-sheet. He put that mail-train over the third in four hours less time than it was ever run before.

Then we waited. The reports came in along the line. The mail special was holding up to the schedule this time, and it went into San Francisco right on the dot, with the fastest time ever made between Chicago and the coast to its credit. More waiting, and then, one day, there came this telegram:

BALDY MURRAY, CARE OF MISS FOWLER'S HOME FOR BACHELORS, WINSLOW, ARIZONA:

We built that track, we got that mail contract, we won the ladies. Come on in, let's take a vacation.

We went. Just before we went I dropped over to the Hon. Charles Flynn's office. By stuttering for an hour and making a few signs, I was able to make him understand that I wanted a marriage license.

Then I got even with Bennett. I asked him to go over and witness the ceremony, and I'm a goat if he didn't go.

(The End.)



The Railroad Man's Brain Teasers.

Rigorous Riddles to Revivify the Reckoning of Rusticating Railroaders.

HERE is a nifty little nerve-racker from C. T. Fleming, Wells, Nevada:

(10) Trains Nos. 1 and 2 are limited trains running between Chicago and San Francisco. No. 1 is west-bound and No. 2 is east-bound. The running time is the same. Now, supposing you were on No. 2, leaving San Francisco going to Chicago, and it took seven days to make the trip, how many No. 1's would you meet, provided there was only one section a day, and that you meet No. 1 the day you leave and the day you arrive?

Paul Laur, Cincinnati, Ohio, kindly sent us this one:

(11) How many square feet can be grazed by an animal which is tied to a rope having 100 feet swing or radius? The end of the rope is fastened to one corner of a building which is 25 feet square in plan?

Dan M. Powell, Black River, Washington, sends two more good ones:

(12) A towerman on a foggy night can just hear an engine whistle 2 miles away. How many times louder must it sound to be heard 3 miles away?

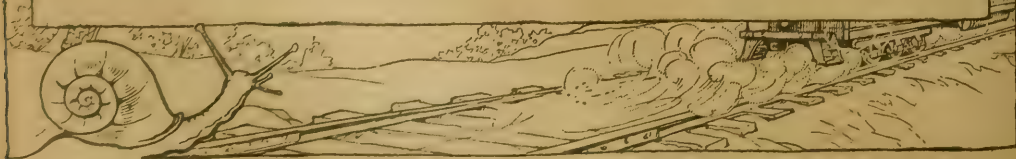
(13) A railway has 2 road engines and a big pusher. The first engine will pull 1,200 tons. If the pusher is coupled with the first engine, they will pull just twice as much as the second engine can pull. If coupled with the second engine, they will pull three times as much as the first engine can pull. How much can the second engine and pusher pull, respectively?

ANSWERS TO THE OCTOBER TEASERS.

(7) Forty-seven cars.

(8) A took off a strip 2.76 inches deep; B, 3.58 inches; and C had a stone 17.32 inches in diameter. When A gave the stone to B, it was 24.48 inches in diameter; when B gave it to C, it was 17.32 inches in diameter.

(9) The purchasing agent bought 25 cabs, 10 coaches, 4 Pullmans. He should have bought 15 cabs, 6 coaches, 2 Pullmans. He forfeited \$160. For computing we use the abstract numbers 12, 30, 75, and 90. Taking the least common multiple of the prices he bought at 12, 30, and 75, we have 300, which allows 25 cabs, 10 coaches, and 4 Pullmans. At the other prices, 12, 30, and 90, we have for the least common multiple, 180, which allows 15 cabs, 6 coaches, and 2 Pullmans. He bought in excess, 10 cabs, 4 coaches, 2 Pullmans; total, 16 cars, which at \$10 each amounts to \$160. his forfeit.



The Sunny Side of the Track.

What the Busy Joke-Smiths of Our Esteemed Contemporaries Have Manufactured Lately in the Hope of Making
Us Laugh.

A RARE EXPERIENCE.

"NO doubt you recall the most enjoyable railroad trip you ever made?"

"Oh, yes. It was a short trip of only half a day, but because his private car had been derailed, the president of the road was traveling with the common herd in an ordinary Pullman car."

"And you enjoyed the novelty of traveling in close proximity to the president of the road?"

"No; it wasn't that particularly. I enjoyed seeing the porter look humble."—*Birmingham Age-Herald*.

LOGICAL.

MOTHER—Now, Bobbie, you mustn't take your train of cars to bed with you.

Bobbie—But, mama, these are sleeping-cars.—*Boston Transcript*.

A CONSCIENTIOUS DECLARATION.

DRUMMER—Will you be mine? All my life I will worship you from February until April, and from August until December. The rest of the time I am on the road—*Fliegende Blaetter*.

HOPKINSON SMITH'S EXPERIENCE.

"DON'T use too long words," said F. Hopkinson Smith, the author.

"I was once on the way to Reading by train, and, at a town nestling beside the river, I came out on the platform and drew in deep breaths of the pure, delicious air.

"Isn't this invigorating?' I said to the brakeman.

"No, sir; it's Conshohocken," said he."—*Philadelphia Bulletin*.

HE DIDN'T WORRY.

DURING the log-train days on the Erie, the local was switching Midland yard. One member of the crew was a green brakeman on his first trip. The experienced man handled the switch list and was cutting the cars at the switch.

The green man was told to catch two cars that would be kicked down the river track and ride

them to the end of the track. He failed to do it, and with increased speed the cars went off the end of the iron, over the embankment into the river.

Just as if nothing unusual had happened, the new man called back, "send down two more, them got away."—*Erie Railroad Employees' Magazine*.

THE WAY THE MONEY GOES.

WE were crowding against the gate the other evening, waiting for the Montreal Express, when one of the red-capped porters succeeded in getting a lady to give him charge of her suit-case. She apparently regretted it a moment later, for she remarked to her companion:

"Now, I suppose I'll have to give him ten cents. Dear me, that's the worst thing about these trips, they do cost so. It don't seem so much by itself, but it all counts up. I haven't a thing smaller, though, have you?"

Number Two came to the rescue in the nick of time.

"Why, yes," said she, "I think I have a nickel. Let me see—No, I haven't, but I have five pennies."

"Give me that, then," said Philanthropist Number One. "Five pennies 'll go just as far with him as a nickel."

And yet we wonder at the rapid increase of wealth among the colored people.—*Railroad Men*.

HE OBEYED THE SIGN.

AN old darky was suing the railroad company for damages. He contended that, not being warned by the whistle or engine-bell, he had started to drive his rig across the company's tracks, when a shunted box car of said company crashed into his outfit, causing the death of the horse, loss of the wagon, and minor injuries to himself. After the prosecution had closed its side of the case, the company's lawyer called the old darky to the stand and went at him.

"Mr. Lamson," he began, "your rig was struck by the box car in full daylight, was it not?"

"I fink dar was some clouds ovahead, suh."

"Never mind the clouds! And only a few days

before this accident the railroad company had put a new sign at that crossing?"

"Dar was a sign dar, ya-as, suh!"

"And didn't that sign say, 'Stop! Look! Listen?'"

"Now, dar am de whol' accusation ub de trouble! If dat 'stop' sign hadn't caught dis chile's eye jes' 's Ah war squar' on dat track, dar wouldn't 'a' been no smash-up!"

STRATEGY ATTEMPTED.

IN the interest of a much-needed reform we would state that careful observation has developed the fact that

NO REALLY YOUNG AND ATTRACTIVE WOMAN EVER GETS OFF A STREET-CAR BACKWARD.

(Maybe this will make an impression on them in time to prevent the wreckage of a large number of Christmas bundles. It is a desperate effort, but it is the last resort.)—*Indianapolis News*.

LADIES FIRST.

"**W**HAT is the reason," began the irritated traveler from the North, "that the trains in this part of the country are always behind time? I have never seen one yet that ran according to its schedule?"

"That, suh," replied the dignified Georgian, "is a mattah that is easily explained. It is due to Southern chivalry, suh."

"Southern chivalry! Where does that come in?"

"You see, suh, the trains are always late in this country because they wait for the ladies, God bless them!"—*Chicago Record-Herald*.

SOMEWHAT MISINFORMED.

FIRST DRUMMER—I saw a sign on a car this morning saying the car was equipped with Blank's draft rigging. What's a draft rigging, anyway?

Second Drummer—Oh, that's a contrivance to regulate the drafts in the cars, of course. Any one ought to know that.—*Santa Fe Employees' Magazine*.

STILL ON THE JOB.

HE—What ever became of your brother, the one who was a switchman?

She—Oh, he is now a preacher.

He—A preacher? Well, there's not much change in his occupation then.

She—Why, how is that?

He—Well, he still does the coupling up, doesn't he?—*Exchange*.

SUPPLIED.

PASSENGER-AGENT—Here are some post-card views along our line of railroad. Would you like them?

Patron—No, thank you, I rode over the line one day last week, and I have views of my own.—*Chicago News*.

IMPOSING ON A PASSENGER.

J. ADAM BEDE, of Minnesota, the humorist of the House, while he was in it, and whose humor still bubbles, despite the fact that he was elected to stay at home, tells the following on a friend of his who travels for a carpet firm:

"My friend," said Bede, "is of a saving disposition, and he recently had to make a longish jaunt with two trunks. Arriving at the station he approached a stranger standing on the platform and said:

"Are you going to Chicago on this train?"

"I am."

"Have you any baggage?"

"No."

"Well, friend, you can do me a favor, and it won't cost you a cent. I've got two good-sized trunks here and they always make me pay excess for one. You can get one checked on your ticket and save me some money."

"Yes, but I haven't any ticket."

"But you said just now that you were going on this train."

"So I am. I'm the conductor."—*San Francisco Examiner*.

THE KINDLY KIND OF PORTER.

"**W**HAT numbah, lady?" asked the pleasant-looking porter, addressing the woman who came on board his Pullman an hour before train time.

"Upper 16," answered the mild passenger.

"Upper 16!" The porter's exclamation was almost a shriek, and his face screwed itself into wrinkles of concern.

"I know it's hard," sighed the woman, as, with a softening of her heart, she felt that this menial was expressing for her the indignation she would have liked to voice herself.

"I don't b'lieve this ca-a'h's all sold out like that!" he scolded. "You just have a seat theah, lady, while I goes into the office; I kin suah git you somethin' bettah!"

The world was not so bad after all. There was a goodness in human nature which exceeded her most optimistic dreams. For here was this man, belonging to a department of service not noted for its eagerness to coddle patrons, taking such a kindly interest in her comfort.

The porter returned, with a lag in his step and a discouraged shake of his head.

"Best we kin do, lady; got an awful crowd comin' on heah to-night."

"Well, it's too bad, but thank you just the same, for your trouble," beamed the recipient of this unusual attention.

"Ya-as'm, suah it's too bad!" muttered the porter, as he started for the linen cupboard. "I was goin' to sleep in uppah 16 myself."—*Puck*.

ON THE EDITORIAL CARPET.

Here's Hoping Every Railroad Man in America Has
a Big Fat Thanksgiving Turkey and Time to Eat It.

THE request that we made in our October number for an indication of the features in THE RAILROAD MAN'S MAGAZINE that our readers liked best has brought forth so many varied replies that we are repeating it again this month. At the end of The Carpet, you will find a coupon. If you have not already cast your vote, we trust you will turn to it and follow the instructions, letting us know where you stand.

This is only a gentle reminder, for we want to hear from you. It is good to get your views on anything pertaining to the magazine. We sit up day and night scratching our sand dome for ideas that will interest and entertain. If we are successful, it is good to know we are on the right track.

Now that we are on this subject, we would like to say a few words regarding those who write us.

There is nothing so annoying or insulting as an anonymous (or unsigned) letter.

If a man has anything to say, he should have the courage to let the editor know who he is and where he lives.

The printing of his name rests with him. If he does not wish to have it published, he need only say so and sign his initials or a *nom de guerre*, which, in plain railway English, is a fictitious monachier.

When we receive a letter—although it may be filled to the markers with perishable matter—which bears no name, or is signed with the ignominious and frazzled cognomen of such well-known back numbers as "Vox Populi," "Constant Reader," "In Hoc Signo," "John Doe," and other hoary has-beens, we at once throw it into the wastebasket as fodder for the goat.

If you intend to write us—and we welcome your letters—don't be afraid to sign your name. We want to know with whom we are talking. Suppose while conversing on an important subject with another man there was a screen placed between you and him, and you could not see each other. What would you think of that?

To get back on the main track.

We will begin two new serials in the December number. They are fresh from the shop, painted red all over and have an action that is similar to the fast mail crossing the prairie.

Then there is a bunch of short stories in which we take particular pride. We are congratulating ourselves that our short fiction has some class.

C. W. Beels contributes a side-splitter entitled "Kennedy's Store Clothes"; Richard Duffy, a dramatic episode of a towerman; George H. Fellowes

will be aboard with a gripping yarn about a telegraph operator; Robert Fulkerson Hoffman has written a story of a Christmas type—it is entitled, "That Night With Mitzler," and is one of the best stories that this well-known fiction writer has sent us. That is some praise, for Mr. Hoffman has contributed to this magazine several short stories that take front rank in this class of literature.

Charles W. Sanders, who has not been in our columns for some months, will contribute a startling narrative of a railroad domestic trouble, and "Honk and Horace," through their esteemed chronicler, Eminet F. Harte, tell what befell them when they returned to Uncle's farm.

And then there will be some others.

Among the special articles will be Thomas A. Edison's days as a news-butcher, telling how this wizard of the century during his idle moments in the baggage-car, conceived some of the ideas that have revolutionized the world. It is written by Frank Marshall White.

Robert H. Rogers, in "The Nerve of the Engineer," describes graphically some incidents of true heroism. In "The Observations of a Country Station-Agent," Mr. J. E. Smith will tell why railroads figure in politics and how easy it isn't to get railroad men to vote.

Train-despatching by telephone is now causing a great amount of comment these days. We have had the matter fully investigated by one of our best writers, and will publish the article in November.

There is a bunch of good stories about the electric railway men, some gripping "Tales of the Tal-low-pots," and a plum-pudding with brandy sauce in the shape of a true story.

We will say no more at present.
Christmas Special! All aboard!

DRINKING CUPS IN RAILWAY TRAINS.

WISCONSIN recently passed a law which prohibits railway trains from carrying public drinking cups, and the Wisconsin State Board of Health has issued an order instructing trainmen on all roads crossing the State to put the cups away when the State line is crossed and not to produce them again until the trains are out of the State. Medical men, health boards and all people who take more than an ordinary interest in their own health will commend this action.

Public drinking-cups, public hair-brushes, and all things of the sort are looked upon as conveyers and purveyors of not merely ordinary diseases, but diseases of the most malignant character. The health of a nation is one of the strongest pillars of its success.

The new law in Wisconsin, by some people and by some railroads, may seem a rather high-handed interference with public comfort, but we fully believe, so far as railroads are concerned, that if they have any doubt as to the hardship caused by such interference, such doubts will not long endure.

Public education in sanitary methods is making rapid progress, and we believe that the people only need some little help to aid them in giving their quota toward a general trend to ultimate perfection. If every railroad in the United States will accept the new Wisconsin law as an inspiration, and voluntarily remove drinking-cups from their trains, they will do the country a service that cannot be measured in words.

It is a simple matter to insist that each and every passenger bring his own tankard. Drinking-glasses and tin cups are so inexpensive that they could easily be brought on a journey and discarded when the passenger reaches his destination. There is now being manufactured a drinking-cup of waxed paper for individual service which can easily be crumpled up and thrown away when once used.

We suggest that the railroads have the courage to order all public drinking-cups from their trains and to supply the news-butchers with a stock of these individual cups, to be sold at a nominal cost.

THE RECENT FOREST FIRES.

RECENT forest fires in the Western States cause many to speculate on their origin. Perhaps no more foolish reason is advanced than that the railroads should be held responsible. We want to know when a spark from a locomotive set fire to a tree of any size! Such a combustion would be worth looking at from many scientific view-points.

The newspapers have opened their columns to all manner of queer theorists, hoping to prevent a catastrophe similar to that of last summer. One of these nimble-minded gentry has stated that all locomotives running through the forest lands should be changed to oil-burners in summer and to coal-burners in winter.

We move that he be sentenced to pay the cost of the change each year.

Forest fires are due to many things. They seldom start at the base of the trees. One of the most frequent causes is due to the igniting of dry leaves on the topmost branches by the rays of the sun. The smouldering fires of tramps, fanned by the wind, is another menace and, perhaps, the most prevalent.

Another cause, and one that should be fully investigated by the government, is laid at the door

of the hired forest fighters. It has been charged that these fighters, who receive thirty cents an hour, start a blaze so that their work may last longer. Mr. Cecil, the assistant district forester, notified Washington on August 22 that there was no doubt that the fires in the Crater National Forest and at Medford resulted from incendiarism, and that new fires were being set constantly. He started twenty-five scouts to catch the culprits.

This is a serious charge, and should be investigated to the very last scrap of evidence, and, it is stated, there is positive evidence in Washington that it is true.

ANOTHER BY CY WARMAN.

ALONG with the other old-time railroad poems which appear in *The Carpet* this month, we want to print the appended little classic by Cy Warman, as able an engineer as ever handled a pen, and as human a poet as ever handled a throttle. "Will the Lights Be White?" for beauty and imagery and pure poetic feeling, is just as good as you will find in any volume by Longfellow, Tennyson, or any other of the high-brow bards. It's the sort of stuff that gets under your collar.

WILL THE LIGHTS BE WHITE?

BY CY WARMAN.

OFF when I feel my engine swerve,
As o'er strange rails we fare,
I strain my eyes around the curve
For what awaits us there.

When swift and free she carries me
Through yards unknown, at night,
I look along the line to see
That all the lamps are white.

A blue light! (rep track) crippled car;
The green light signals "slow."
The red light is a danger light,
The white light "Let her go."

Again the open fields we roam,
And when the night is fair,
I gaze up in the starry dome,
And wonder what is there.

For who can speak for those who dwell
Behind the curving sky?
No man has ever lived to tell
Just what it means to die.

Swift toward life's terminal I trend,
The run seems short to-night.
God only knows what's at the end;
I hope the lamps are white.

WALSCHAERT'S VALVE-GEAR.

PEOPLE interested in railroads, who chance to live near the great trunk lines, have noticed the remarkable change in locomotive design which has taken place in the last three or four years, and

which is due to the increasing use of the Walschaert valve-gear. The locomotives equipped with this gear present a distinctly different appearance from those operating with the old-style Stephenson link-motion. The first is mounted on the outside of the locomotive; the latter, out of sight between the frames.

The difference is particularly noticeable when running at high speed—the lines of flashing light made by the flying steelwork of the Walschaert rods and links give a locomotive the appearance of a gigantic insect fleeing on mighty legs.

In this issue of *THE RAILROAD MAN'S MAGAZINE* we publish a complete description of this wonder mechanism, by Robert H. Rogers. It is valuable to railroad men and all mechanics, for it is the last word on this all-important phase of locomotive practice.

Egide Walschaert, the inventor, was born in the little Belgian town of Mechlin, ninety years ago. He made application for a patent on his gear when he was only twenty-four years old. He died in 1901—just as the great railroads were making tardy recognition of his genius. To the memory of this modest, patient inventor the world owes a deep debt of gratitude.

TEST FOR CONCRETE TIES.

THE American Concrete and Steel Railroad Tie Company has received an order from the Terminal Railroad Association, of St. Louis, for a section of their concrete ties to be placed under the tracks in the yards at St. Louis. As all the railroads entering St. Louis use the terminal tracks, this will be a test for steel ties worth noticing.

A section of these ties was placed, several weeks ago, under the rails of the main line of the Alabama Great Southern Railroad. They have been passed over by the passenger and freight trains of this company, and, according to statements from officials of the road, have measured up to every requirement.

Concrete cross-ties have been made before this, but on being tested, have exhibited a lack of elasticity, making them impracticable, as a rigid road-bed is injurious to rolling stock. However, this tie is said to overcome this objection. It is made in two sections, being disjoined in the middle, thus giving elasticity. A cross-section extends out on each side, slightly beveled from the center bearing to each end of this cross-section, which allows the rail the necessary spring. A steel bar, countersunk, is placed on top of the tie sections which joins the rail, extending under the rail, and clamped on the outside of the rail, while a steel clamp on the inside of the rail, resting against a boss on the steel bar, and inside of the rail, is secured to the cement tie by a bolt running through the tie. This arrangement makes it impossible for the rails to spread or turn over.

The problem of securing a cross tie to substitute wood has long been a subject of deep concern to all railroads. The life of the present wood tie is from

five to seven years, while that of the concrete tie is practically indefinite.

YOU MAY—AND WE THANK YOU!

EDITOR, *THE RAILROAD MAN'S MAGAZINE*.

MAY I take the liberty of sending you a railroad poem which I happened to come across? I have never seen this one printed in *The Carpet*, and I thought some of the readers might like it.

I am only a girl, but I am very fond of your magazine, and always read it through every month. I have two brothers who are railroad men and that, perhaps, accounts for my interest in the road.

Anyway, here's to the long life and success of *THE RAILROAD MAN'S MAGAZINE*!

IDA M.,
Salt Lake City, Utah.

THE FAST FREIGHT.

BY ELLIS B. HARRIS.

A SHORT "Toot! toot!" from the engine flute
And a "high-ball" from the year,
The switch is set by an old-time "vet,"
And the block for the main line clear.
There's a bird-like trill from the triple's bill,
As the shoes from tread drop free,
A creak and a clank from the draw-bar shank,
In the crunch of the coil to the key.

A short, quick bark, a flash in the dark,
From the door where the hot flames play,
A trembling slip—a sand-bound grip,
And the flier's under way.
Through the bustling yard where the earth is jarred
By the dip of the giant's careen,
And the switch-lights wink to the clinkity-clink,
As they flash from red to green.

From the pop-valve twined, in the cutting wind,
Fly streamers of hissing white,
Like ribbons of pearl, in the swish and whirl,
Or a ghost, in a frolic of night.
A mile ahead there's a twinkling red,
And the distant echoes mock
The long clear note from the whistle's throat,
As it calls for the interlock.

Then—presto-click, like a magic trick,
And the crimson flashes white,
In the wizard's power, from the signal-tower,
As it snaps the de-rail tight.
There's a swish and sway through the right of way
And the jar of the wheel-truck's leap,
As the red caboose tears the gravel loose,
In the draft of its swing and sweep.

While the grass bends low in the undertow,
And its tendrils twist and strain
To join the crowd of the atomic cloud,
In pursuit of the speeding train.
A crash and roar—in the tunnel's more—
The dart of a cannon-ball—
While the cinders hail through the stifling gale
That recoils from the rocky wall.

Then out from the mouth and away to the south,
Where the Mississippi flows,
And a queenly craft, with her wheel abaft,
The softest signal blows—

Coo-ool coo-ool as if to woo
 Swift Mercury from his rout,
 But his winged heels mock her appeals
 With a roar of a scornful flout.

A click-clack-a click-clack-clack,
 On, on to the busy mart,
 With roll and pitch o'er frog and switch,
 Up close to its throbbing heart—
 Then a grinding sound where the wheels turn round,
 And the brakes are tightly pressed,
 While the bell's loud chime rings in on time
 The run of the "Manifest."

Youth's Companion.



WHAT HAPPENED TO BILL.

ONE of our readers, at present residing in Guantanamo, Cuba, sends us the following letter from a friend. It adds another chapter to the long story of railroad men in South America:

We found a nice bunch of fellows on the Panama Railway, and the train-master passed us to Panama without a question. There I left Dodson and took the boat for Lima, or rather Callao, which is the seaport. I found a tremendous difference in the rates charged for passage on this steamer. First-class fare was more money than I had, but deck passage was surprisingly cheap. I invested in that and fixed the rest of it with a steward as soon as they cleared the yard, without any trouble at all. Most of the passengers were customers of his, as that seemed to be the usual method of procedure.

Arrived in Lima O. K., and, on reporting, found that my job was at the front, and I had to cross the top of the hill to get to it. Many people are made very sick by the rarefied air at the summit, and they set a car off toward the top for those who wish to go back.

I remembered your theory about equalizing the pressure of air on the ear-drums by frequent swallowing during the ascent, and, whether that had anything to do with it or not, I suffered no inconvenience except from the cold. I found use for all the clothes I could comfortably carry, and was not any too warm at that. The Indians who live in those mountains seem utterly indifferent to the cold. You often see them standing barefooted in the snow to watch the train go by.

I drew a freight run, bought a lot of clothes, and talked myself into a good tight caboose with a good stove in it. Had pulled down a couple of pays, learned the road, and was beginning to figure on how long it was going to take me to save that two thousand, when—it happened.

We were running down the hill, on the inside of the mountains, with five flats loaded with "cholo" laborers and their families, moving camp, ahead of the engine.

I did not like the make-up, but there was no help for it, as there was no siding where we picked them up. The line was nearly all sharp curves, with the country straight up on one side of the track and straight down on the other. Just a crooked scratch on the hillside.

I took the head-end myself, put a "cholo" brakeman on the third car back to pass signals, and we started. We were dropping down at about fifteen miles an hour, when I sighted a big boulder

that had rolled from up-country somewhere right onto the middle of the track.

I signaled, and yelled, but that brakeman was talking to a woman, and the engine cab was out of sight behind the curve. Of course, a woman was the cause of my trouble, as usual, though I didn't even know her.

I sprang the air, side-stepped, and some few of the people fell off, but three cars were pushed over the edge and fell, rolling down an almost perpendicular slope for about three hundred feet.

Something like two hundred men, women, and children went with them and were, all of them who could not fly, more or less hurt. Twenty-one were found dead up to the time I left. I had a main line sounder in the caboose, and cut in on the wire to report and order the ambulance.

Then I consulted with the engineer as to the best thing for us to do. You know the law there holds the "captain" and "maquinista" responsible for any injuries caused by their train. The engineer said that he was afraid to take to the country, with its ice, snow, and Indians in the mountains, with dwellings few and far apart, and preferred to stay and take his chances with the authorities. I don't think that he was really afraid of the country. He was too bull-headed to run.

I rubbered into the jail at Lima once, and preferred to die some other way. I stayed by the wreck as long as I could do anything to help the situation, but when the relief train was reported, I packed my grip. Taking the "cholo" brakeman who had caused the trouble, with me, I faded away. The brakeman did not want to go at first, but as I needed him for guide, interpreter, and pack animal, I talked the fear of the law into him until he was soon as anxious as I was to escape.

I don't like to think about that trip. I have been told since that I could have gotten out through Brazil, via the Amazon River, with less hardship, but the only trail I knew was the Pacific Ocean, so I headed west. That is the roof of the world, all right, and it isn't a flat roof, either. It is clear up above civilization. Nothing can live long up there except those Indians and the llamas. The mule line is just above the snow line, and they use llamas for packing freight in the high hills.

A llama is a slightly overgrown goat who spits at you instead of butting. They can live and thrive on snow and mighty thin air—and there is nothing else up there. There are mighty few towns and roads in the country, but I had to keep away from the few there were, for I did not want to meet the ruralias.

I had to sacrifice speed to safety all the way, and it was forty-two days after the wreck when I finally sneaked into Santa and put up at a sailors' boarding-house down on the water-front.

I was a wreck. I didn't know myself when I looked in a glass. I got a suit of clothes from the boarding-house slop-chest, and when the Panama boat came along, I managed to get aboard and stow away. I was afraid to book a passage, and did not have enough money left, anyway. Gave a steward all I had, except five dollars, to fix me up for Panama, and kept out of sight until we had passed the last town on the coast of Peru. ●

When I went up on deck I found two mining engineers from some mines just beyond where I had the wreck, and they gave me the first news I had heard of it. They said that the engineer of the wrecked train was in jail, and the best they could expect for him was a five-year sentence.

That made me glad I had taken a chance. I would go through it again rather than spend five years in one of their jails.

They also told me that the whole Peruvian army had my description and orders to bring me in dead or alive. They could hardly believe that I had actually made a getaway, and it certainly was a miracle, for an American traveling alone and on foot in that country is bound to attract considerable attention, and a gringo isn't very well liked, anyway. That road owes me three days' pay, but, under the circumstances, I don't think I will go back after it.
—BILL.

"CASEY" JONES.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

FOR the general information of railroad men, through the circulation of your valuable magazine, I would like to say a word or two in regard to one particular engineer, who has been instrumental in immortalizing the locomotive, as Mark Twain immortalized the steamboat.

That man was John Luther Jones, better known from coast to coast as "Casey Jones."

He was born at Cayce, Kentucky, in 1863, and he spent his boyhood days on a Kentucky farm. When he was nineteen years of age he fired a locomotive on the Mobile and Ohio Railroad, and later occupied a position of a similar nature on the Illinois Central.

In 1890, he was promoted to the position of engineer, which he held with honor until his death.

He was transferred from Water Valley, Mississippi, and ran a freight engine there until he was eligible to the Chicago and New Orleans Limited, and it was on this midnight run on March 18, 1900, that he lost his life in a rear-end collision with a freight-train at Vaughans, Mississippi.

By his amiable disposition and smiling face he had friends by the hundreds. The song bearing his name, was written and sung by an old round-house dinky by the name of Wallace Sanders. By the merry jingle of the song it is evident that the author never knew trouble or sorrow, for he turns a house of sorrow into a gay carnival.

I can call to mind many kindnesses performed by Jones. It is no more than right that such men should not be forgotten so easily.

GEORGE L. GARNETT,
Birmingham, Alabama.

THE LONGEST BRIDGE.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

YOUR September number states that the longest bridge in the world is the Lion Bridge at Sangong, China, which is five and a quarter miles in length. What about the Norfolk and Southern Railroad bridge across Albemarle Sound, eastern North Carolina, from Edenton to Mackay's Ferry, which is about six miles long?

This bridge was just completed at a cost of one million dollars, and is said to be the longest bridge across navigable water in the world. There is a bridge also, on the L. and N., in Louisiana, across Lake Pontchartrain, about twelve miles long.

I am an old reader of THE RAILROAD MAN'S

MAGAZINE, but this is the first time I have had an opportunity to write you.

PERCY B. PERRY,
Raleigh, North Carolina.

ANOTHER OLD POEM.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

HERE is an old railroad poem which I found in an old scrap-book in a tower on the Erie Railroad.
J. H. ROY,
Rochester, New York.

"THE HAM AT CB TOWER."

INTO the chief despatcher's office,
One day there walked a man;
The chief he looked him over,
And decided he was a ham.

"Mr. Chief, I am an operator,
A job I want, and quick,
If you have any vacancies,
I think I could work third trick."

Now, it happened there was an opening
At a little place called Birr.
The despatcher sent him down there
At fifty dollars per.

The ham went to work at midnight,
It nearly made him weep.
He got so very sleepy,
That soon he dropped asleep.

At two A.M. the ham awoke—
It made him have a pain,
For he looked out through the window
And espied a coming train.

The ham gave a start, and jumping up
He pulled over the wrong switch.
And right in front of his station
The train ran in the ditch.

The ham was much excited,
And he looked around with fright.
He could see the big electric chair—
To him 'twas an awful sight.

He could stand the strain no longer,
So with an awful bound,
He jumped right through the window,
And landed on the ground.

This ham is now a-working
For a ham factory—please don't weep—
He is the manager's assistant
At thirteen bones per week.

WE APOLOGIZE TO MISS HERZOG.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your last issue a writer, speaking of Miss Sophie Herzog, the lady surgeon of the St. L., B., and M. Ry., gives certain erroneous impressions of that grand old lady. Miss Herzog, at the time of the building of the Brownsville road, was

between fifty-five and sixty years old, and weighed but a little short of two hundred pounds, probably more. The reporter gives the impression of a small, young woman, who rode broncos willy-nilly.

Miss Herzog is not ashamed of her age and weight, and will doubtless sustain my contentions if questioned. She is living at Kingsville, Texas.

Somebody let his imagination have full swing and didn't make use of his eyes.

A. CONSTANT READER.

MISSISSIPPI CAR FERRY.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

ON page 683 of the September number of THE RAILROAD MAN'S MAGAZINE you state, in answer to F. W. T., Ogden, Utah, that there is no ferry for cars over the Mississippi River at Memphis, Tennessee. This is an error. The Rock Island Railway has a transfer boat, the "General Pierson," capacity ten cars a trip, which is used in transferring freight-cars from Hopefield, Arkansas, to Memphis, Tennessee. The average time of the trip is about one hour.

K. G. WILLIAMS,
Little Rock, Arkansas.

TUNNELING THE SIERRAS.

FOR many years past the railway officials of the Southern Pacific have been seriously considering the feasibility of boring an immensely long tunnel through a part of the Sierra Nevadas.

This was one of the pet schemes of the late Mr. Harriman. Surveys were completed several years ago and also the drawings, etc. The project has been pronounced entirely practicable by the engineers of the company. But, for various reasons, work on the beginning of this gigantic bore has been deferred from time to time.

It is reported now on good authority that the contractors who have charge of the work on the

Southern Pacific cut-off near Auburn, California, have secured an additional contract that will extend this cut-off from Colfax to Goldrun. In the opinion of the general railroad public such an extension can mean only one thing—that this long-talked-of tunnel is to be bored at last, and that actual operations will be commenced in the near future.

The projected tunnel will be on the main line between Blue Cañon and Donner Lake. This immense bore will be about six miles long, will cost between five million dollars and six million dollars, and several years will be required to complete it. It will be the longest tunnel in the United States, and one of the longest in the entire world. It will obviate twenty miles of heavy grades and snowsheds.

THE STEEPEST BROAD-GAGE.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN reply to G. N. G., Fulton, Illinois, you state that the steepest broad-gage is over Raton Mountain in New Mexico. In my belief the steepest is the El Paso and Southwestern Railroad, which runs from Alamogordo to Cloudcroft, New Mexico. Some of it is four per cent, and one part is five per cent. It is also one of the shortest curved roads of which I know.

G. F. MACOMBER,
El Paso, Texas.

"BIBLEBACK" SMITH.

H. M. SCHOONMAKER, R. R. No. 1, Box 69, Peru, Kansas, writes us asking for the address of William Smith, better known as "Bibleback" Smith, who was employed as an engineer on the Western division of the Erie Railroad a few years ago. Can any one come to Mr. Schoonmaker's assistance?

WHAT DO YOU LIKE BEST IN THE RAILROAD MAN'S MAGAZINE?

HERE'S your chance, boys, to cast your ballots and do a little voting on what YOU consider the most interesting feature in THE RAILROAD MAN'S MAGAZINE.

If there is any particular department or line of stories or articles that you particularly like or consider better than some of the other matter we publish, just make a check after the subject in the list printed below. Cut this out, paste it on the back of a postal card, and mail it to us. It will help us to get more of the sort of stuff you like best.

Serials

Short Stories

By the Light of the Lantern

The Railroad Man's Brain Teasers

Observations of a Country Station-Agent

Told in the Roundhouse

Honk and Horace Stories

Told in the Smoker

Gilson Willets's Tours

Special Railroad Articles

True Stories Series

On the Editorial Carpet

Address: Editor, THE RAILROAD MAN'S MAGAZINE,
175 Fifth Avenue, New York, N. Y.

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The keenest, lasting pride and satisfaction come to every householder to know that this winter and many succeeding winters his loved ones are to enjoy the delightful experience of a home

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The world - wide, rapidly increasing use of IDEAL Boilers and AMERICAN Radiators proves that they are the most economical in fuel consumption of all heaters yet made and the simplest to care for. They are an investment — not an expense — as the savings they bring about soon repay their cost.



A No. 2118 IDEAL Boiler and 270 ft. of 38-in. AMERICAN Radiators, costing owner \$135, were used to Hot-Water heat this cottage.



A No. A 241 IDEAL Boiler and 461 ft. of 38-in. AMERICAN Radiators, costing owner \$215, were used to Hot-Water heat this cottage.

At these prices the goods can be bought of any reputable, competent fitter. This did not include cost of labor, pipe, valves, freight, etc., which installation is extra and varies according to climatic and other conditions.

If you want to make your home a haven of warmth, don't wait until you build, but comfort your present house with an outfit of IDEAL Boilers and AMERICAN Radiators. Put in now without disturbing your old heaters until ready to start fire in the new.

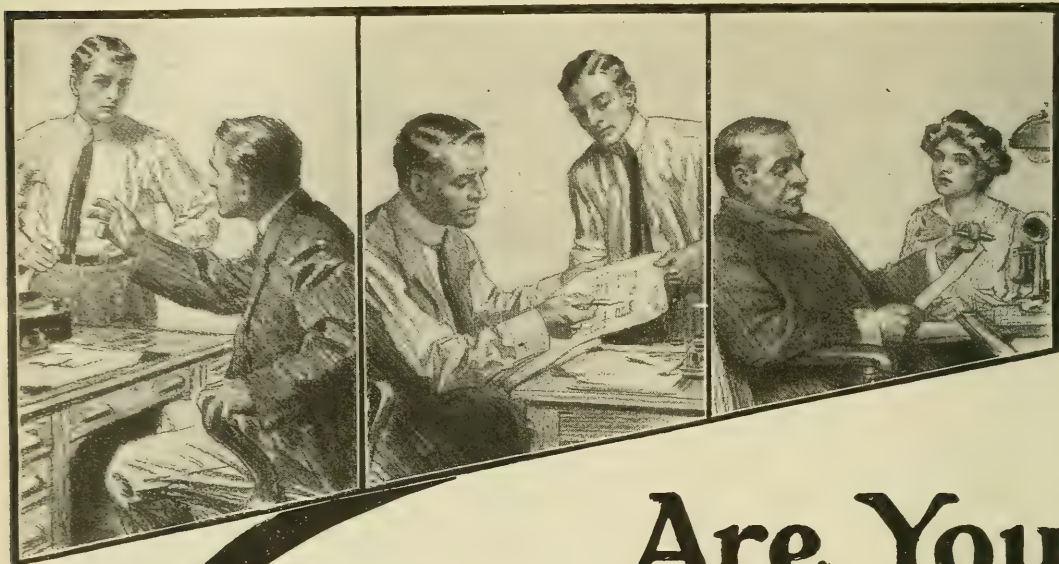
Ask for book (free) "Ideal Heating" which tells all the advantages of the world - famous IDEAL Boilers and AMERICAN Radiators. Showrooms in all large cities.

Write Dept. J

AMERICAN RADIATOR COMPANY

CHICAGO





Are You A Time Improver

Mark well the group of pictures on the left and the group on the right. One shows men who have utilized their spare time and gained positions of influence and worth. The other shows the class of men who are ever struggling along in poor "jobs." They have just as much spare time as the time improver, but they waste it. Some waste it on the corner, in the pool room, at the theater, or otherwise.

Every man is entitled to some pleasure and recreation, but as time is an asset more valuable even than money, every man owes it to himself to utilize a certain portion of his spare time for self improvement.

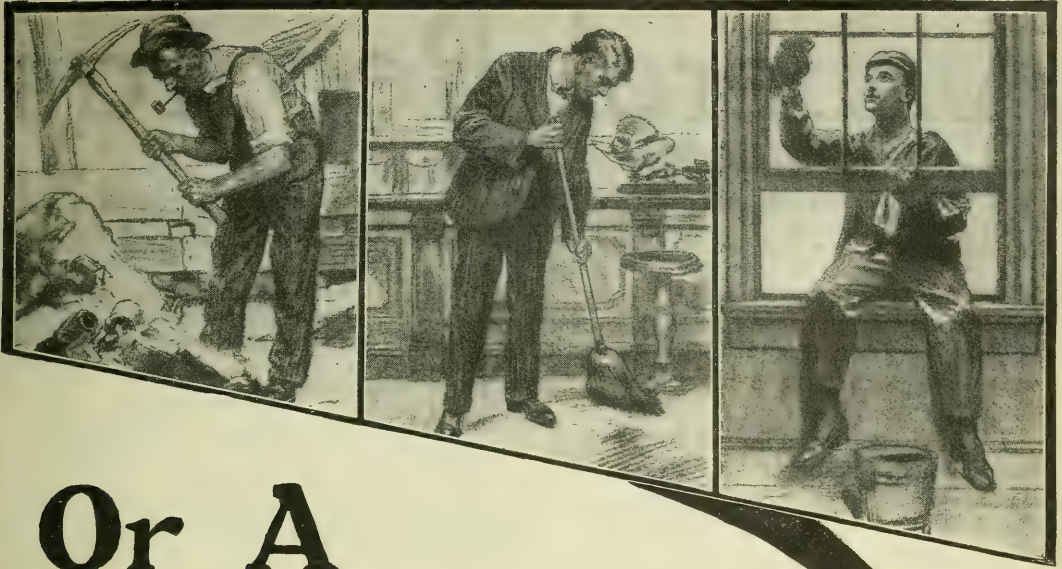
If you have two hours a day unoccupied, we guarantee that one hour of that time properly applied under I. C. S. direction will qualify you for a good position at double, triple or quadruple your wages.

This is not a mere statement for you to believe or not believe as you choose; it is backed up by a world of proof that no one can deny. We can send you the names and addresses of thousands of men who have advanced from lowly positions to some of the most prominent places in business, science and art.

For instance, Ernest Murphy, who used his spare time under I. C. S. direction, was advanced from carpenter to Assistant Consulting Engineer; J. J. Loud jumped from laborer to Assistant Electrician; Joseph Worden, telegraph operator to draftsman; Wilson P. Hunt from apprentice to President of a large manufacturing concern; S. G. Brinton from janitor to the position of Assistant Postmaster.

These are only a few of thousands, the names and addresses of whom you can have on application, so you can ask them for yourself. You will find they had no more brains than you; that they had no greater ability; that they had no more spare time; that they had no more spare cash; but they did have the ambition and common sense to use their time to advantage instead of wasting it.

It is easy to find out how this can be done. It is simply up to you.



Or A Time Waster

There is not a poorly-paid but ambitious man in the world that the I. C. S. cannot help, provided he can read and write. Have *you* enough *real* ambition to mark the attached coupon and learn of the I. C. S. way that fits *your* case? It makes no difference *who* you are, *what* you do, *where* you live, *what* you earn, or *what* your age,—if you are ambitious, the way is open. Do you want to? Then mark the attached coupon *to-day* opposite the occupation you like best. The I. C. S. will then tell you how you can be helped *at home—in your spare time*—without encroaching on your working time—and on such easy terms that you will be able to meet them easily.

Do You Want To?

Here, then, is the opportunity that proves whether your ambition is real or not. Mark the coupon. This, at least, costs you nothing. Mark it and learn how you can join the host of successful I. C. S. men who, at the rate of 300 every month, **VOLUNTARILY** report advancement in salary and position *as the direct* result of I. C. S. help. 307 were heard from during August.

**Do You Want To?
Of Course You Want To.
Mark the Coupon.**

INTERNATIONAL CORRESPONDENCE SCHOOLS. Box 861, SCRANTON, PA.

Please explain, without further obligation on my part, how I can qualify for the position, trade or profession before which I have marked X.

General Foreman
R. R. Shop Foreman
R. R. Traveling Eng.
R. R. Trav'g Fireman
Locomotive Engineer
Air-Brake Instructor
Air-Brake Inspector
Air Brake Repairman
Mechanical Engineer
Mechanical Draftsman
R.R. Construction Eng.
Surveyor
Civil Engineer
Banking

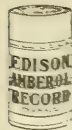
Electrical Engineer
Machine Designer
Electrician
Mining Engineer
Mine Foreman
Foreman Machinist
Chemist
Assayer
Architect
Bookkeeper
Stenographer
Advertising Man
Automobile Running
Concrete Construction

Name _____
Employed by _____ R. R. _____
Employed as _____
Street and No. _____
City _____ State _____

Amberol Records

Records

4 minute
for
October



Edison Amberol Records stand today as the greatest triumph in record-making.

They have brought to Phonograph owners songs and music never before offered in record form.

Prior to the perfection of Amberol Records much of the world's best music was too long to be put upon a record. If offered at all, it was spoiled by cutting or hurrying.

The Amberol Records, playing four and a half minutes, offer such music, executed as the composer intended, and each selection is complete.

Before you buy a sound-reproducing instrument, hear an Edison Phonograph play an Amberol Record. Look over the Edison Record list and see the songs and selections offered exclusively on Amberol Records and remember that it's the Edison Phonograph that plays both Amberol (4½-minute) and Standard (2-minute) Records.

There is an Edison Phonograph at whatever price you wish to pay, from the Gem, at \$12.50, to the Amberola, at \$200.00.

The owner of an Edison Phonograph has the advantage each month of two long lists of Records from which to choose. Here is offered the real song hits of the moment, musical selections by famous soloists, bands and orchestras, tuneful bits from musical attractions and arias from grand opera—each on a Record of the right playing length to faithfully and completely reproduce it.

Run over this list of Edison Amberol and Edison Standard Records. Then go to an Edison dealer on September 24th and hear an Edison Phonograph play those to your liking.

There are Edison dealers everywhere. Go to the nearest and hear the Edison Phonograph play both Edison Standard and Amberol Records. Get complete catalogs from your dealer or from us.

Edison Amberol Records

U. S., 50c; Canada, 65c.

- 520 Medley Overture—Haviland's Song Hits
Edison Concert Band
- 521 Boy o' Mine Frank C. Stanley
- 522 When the Daisies Bloom
Miss Barbour and Mr. Anthony
- 523 Jere Sanford's Yodling and Whistling Specialty
Jere Sanford
- 524 Cupid's Appeal Charles Daab
- 525 Auld Lang Syne Marie Narelle
- 526 Fading, Still Fading Knickerbocker Quartet
- 527 Humorous Transcriptions on a German Folk-Song
Victor Herbert and his Orchestra
- 528 Gee! But There's Class to a Girl Like You
Manuel Romain
- 529 "Mamma's Boy"—Descriptive
Len Spencer and Company
- 530 Kerry Mills' Nantucket . New York Military Band
- 531 Come, Be My Sunshine, Dearie
Billy Murray and Chorus
- 532 Hope Beyond Anthony and Harrison
- 533 Just for a Girl Edward M. Favor
- 534 You Are the Ideal of My Dreams . W. H. Thompson
- 535 Mandy, How Do You Do?
Ada Jones and Billy Murray and Chorus
- 536 The Premier Polka Arthur S. Witcomb
- 537 When the Robins Nest Again
Will Oakland and Chorus
- 538 Trip to the County Fair.....Premier Quartet
- 539 Temptation Rag New York Military Band

Edison Standard Records

U. S., 35c; Canada, 40c.

- 10426 Strenuous Life March U. S. Marine Band
- 10427 Sweet Italian Love Billy Murray
- 10428 The Bright Forever Edison Mixed Quartet
- 10429 I've Got the Time, I've Got the Place
Byron G. Harlan
- 10430 Cameo Polka Charles Daab
- 10431 I'll Await My Love.....Will Oakland
- 10432 Yucatan Man Collins and Harlan
- 10433 Play That Barber Shop Chord. .Edward Mecker
- 10434 The Mocking Bird Roxy P. La Rocca
- 10435 Off in the Silly Night....Knickerbocker Quartet

Edison Grand Opera Amberol Records

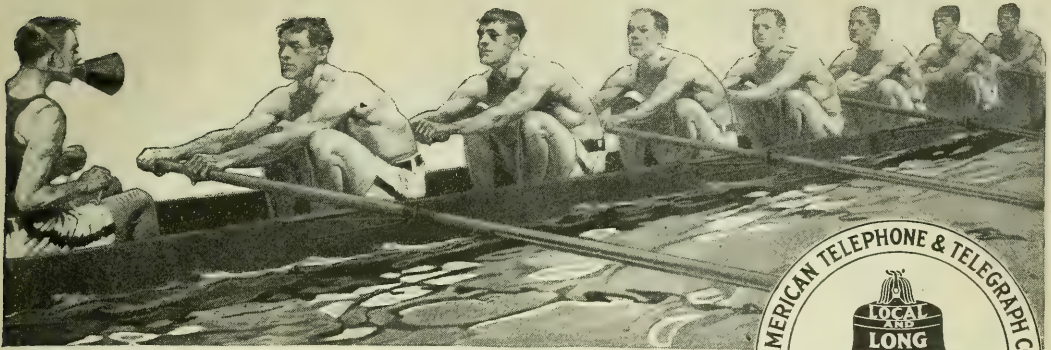
- 40027 Andrea Chenier—La mamma morta (Giordano)
(Sung in Italian) Orchestra Accompaniment
U. S., \$2.00., Canada, \$2.50 Carmen Melis
- 40028 Faust—Cavatina, Salut! demeure (Gounod)
(Sung in French) Orchestra Accompaniment
U. S., \$2.00. Canada, \$2.50 Karl Jörn
- 40029 Gioconda—Voce di donna (Ponchielli)
(Sung in Italian) Orchestra Accompaniment
U. S., \$2.00. Canada, \$2.50 Marie Delna
- 40030 Pescatori di Perle—Aria (Romanza) (Bizet)
(Sung in Italian) Orchestra Accompaniment
U. S., \$2.00. Canada, \$2.50 Giovanni Polese
- 30029 Favorita—Una vergine (Donizetti)
(Sung in Italian) Orchestra Accompaniment
U. S., \$1.00. Canada, \$1.25 Florencie Constantino

Amberol Record by Sarah Bernhardt

- 95007 L'Aiglon—La Plaine de Wagram
(Edward Rostand) (In French)
U. S., \$1.50. Canada, \$2.00 Sarah Bernhardt

NATIONAL PHONOGRAPH COMPANY
92 Lakeside Avenue, Orange, N. J.

With the Edison Business Phonograph you are not dependent upon any one stenographer. Any typist in your office can transcribe your work.



The Work that Counts

There is no wasted energy, no lost motion in the work of the 'Varsity Crew. Perfect team work, co-operative effort and uniform action are strikingly exemplified.

The same principle of intelligent co-operation exists in telephone communication in its broadest application.

In handling the talk of the nation the Bell operators respond to millions of different calls from millions of different people, twenty million communications being made every day.

Ten million miles of wire, five million telephones and thousands of switchboards are used to handle this vast traffic.

More than a hundred thousand employees, pulling together, keep the entire system attuned. Unity is the keynote. Without this harmony of co-operation such service as is demanded would be impossible.

One policy, broad and general, in which uniformity of method and co-operation are the underlying principles, results in universal service for nearly a hundred million people.

**AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES**

"One Policy, One System, Universal Service"



ROASTS

No other seasoning can equal the delicate touch given all roasts by adding

LEA & PERRINS

SAUCE

THE ORIGINAL WORCESTERSHIRE

The leading cooks throughout the world know the value of Lea & Perrins Sauce as the "final touch" to many a dish.

Beware of Imitations.

JOHN DUNCAN'S SONS, Agents, New York.

NEW MODEL



IVER JOHNSON

SAFETY AUTOMATIC REVOLVER

Sharp, smooth action, safety and accuracy are combined as never before in a small arm—in the New Iver Johnson Revolver.

Spiral Springs of Tempered Steel

Every spring of the old-style flat type has been replaced by the most durable types of spring made—spiral and round wire springs of drawn tempered steel. The U. S. Government army rifle, which is the finest in the world, has spiral springs throughout wherever they can be used. The reason is obvious. The Iver Johnson is the *only revolver* so equipped. Hence it is the one you can trust absolutely to act surely and positively at all times. And the famous safety lever, simple but sure, makes it possible to

"Hammer the Hammer"

IVER JOHNSON SAFETY HAMMER REVOLVER

3-inch barrel, nickel-plated finish, 22 rimfire cartridge, 32 or 38 centerfire cartridge

\$6.00

IVER JOHNSON SAFETY HAMMERLESS REVOLVER

3-inch barrel, nickel-plated finish, 32 or 38 centerfire cartridge,

\$7.00

Nearly all firearms dealers carry Iver Johnson revolvers. Where unobtainable locally, we ship direct on receipt of price. The owl's head on the grip and our name on the barrel mark the genuine.

Send for our new technical catalogue, illustrated, which tells all about the New Models.

IVER JOHNSON'S ARMS & CYCLE WORKS, 172 River St., Fitchburg, Mass.

NEW YORK—99 Chambers Street. HAMBURG, GERMANY—Pickhuben 4. PACIFIC COAST—717 Market Street, San Francisco, Cal. LONDON, ENGLAND—40 Queen Street, Cheapside, E. C.

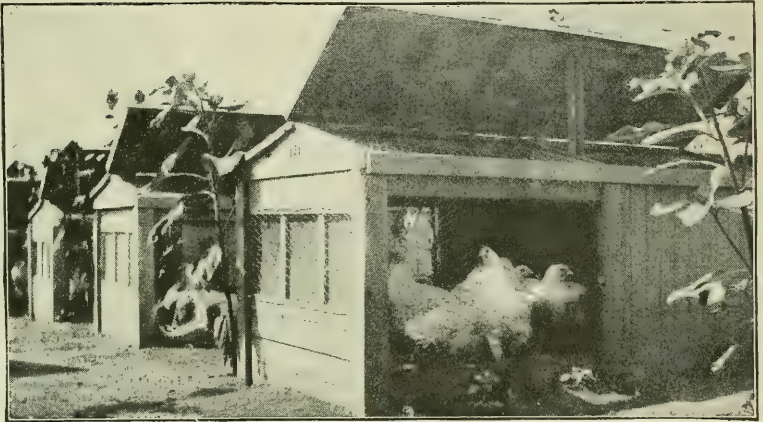
Makers of Iver Johnson Single Barrel Shotguns and Iver Johnson Truss Bridge Bicycles.



A LIVING FROM POULTRY

\$1,500.00 from 60 Hens in Ten Months on a City Lot 40 Feet Square

TO the average poultry-man that would seem impossible, and when we tell you that we have actually done a \$1500 poultry business with 60 hens on a corner in the city garden 40 feet wide by 40 feet long, we are simply stating facts. It would not be possible to get such returns by any one of the systems of poultry keeping recommended and practiced by the American people, still it can be accomplished by the



Note the condition of these three months old pullets. These pullets and their ancestors for seven generations have never been allowed to run outside the coop.

PHILO SYSTEM

THE PHILO SYSTEM IS UNLIKE ALL OTHER WAYS OF KEEPING POULTRY

and in many respects just the reverse, accomplishing things in poultry work that have always been considered impossible, and getting unheard-of results that are hard to believe without seeing.

THE NEW SYSTEM COVERS ALL BRANCHES OF THE WORK NECESSARY FOR SUCCESS

from selecting the breeders to marketing the product. It tells how to get eggs that will hatch, how to hatch nearly every egg and how to raise nearly all the chicks hatched. It gives complete plans in detail how to make everything necessary to run the business and at less than half the cost required to handle the poultry business in any other manner.

TWO-POUND BROILERS IN EIGHT WEEKS

are raised in a space of less than a square foot to the broiler, and the broilers are of the very best quality, bringing here 3 cents a pound above the highest market price.

OUR SIX-MONTH-OLD PULLETS ARE LAYING AT THE RATE OF 24 EGGS EACH PER MONTH

in a space of two square feet for each bird. No green cut bone of any description is fed, and the food used is inexpensive as compared with food others are using.

Our new book, *The Philo System of Poultry Keeping*, gives full particulars regarding these wonderful discoveries, with simple, easy-to-understand directions that are right to the point, and 15 pages of illustrations showing all branches of the work from start to finish.

DON'T LET THE CHICKS DIE IN THE SHELL

One of the secrets of success is to save all the chickens that are fully developed at hatching time, whether they can crack the shell or not. It is a simple trick, and believed to be the secret of the ancient Egyptians and Chinese which enabled them to sell the chicks at 10 cents a dozen.

CHICKEN FEED AT FIFTEEN CENTS A BUSHEL

Our book tells how to make the best green food with but little trouble and have a good supply any day in the year, winter or summer. It is just as impossible to get a large egg yield without green food as it is to keep a cow without hay or fodder.

OUR NEW BROODER SAVES 2 CENTS ON EACH CHICKEN

No lamp required. No danger of chilling, over-heating or burning up the chickens as with brooders using lamps or any kind of fire. They also keep the lice off the chickens automatically or kill any that may be on them when placed in the brooder. Our book gives full plans and the right to make and use them. One can easily be made in an hour at a cost of 25 to 50 cents.

TESTIMONIAL

South Britain, Conn., April 19, 1909

Mr. E. R. Philo, Elmira, N. Y.

Dear Sir:—I have followed your system as close as I could; the result is a complete success. If there can be any improvement on nature, your brooder is it. The first experience I had with your System was last December. I hatched 17 chicks under two hens, put them as soon as hatched in one of your brooders out of doors and at the age of three months I sold them at 35c. a pound. They then averaged 2½ lbs. each, and the man I sold them to said they were the finest he ever saw and he wants all I can spare this season.

Yours truly,

A. E. Nelson.

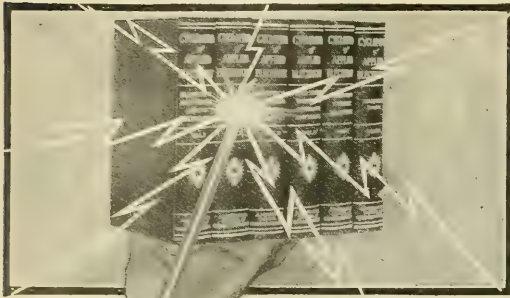
SPECIAL OFFER

Send \$1.00 for one year's subscription to the *Poultry Review*, a monthly magazine devoted to progressive methods of poultry keeping, and we will include, without charge, a copy of the latest revised edition of the *Philo System Book*.



Photograph Showing a Portion of the Philo National Poultry Institute Poultry Plant, Where There Are Now Over 5,000 Pedigree White Orpingtons on Less Than a Half Acre of Land.

E. R. PHILO, Publisher
2534 Lake St., Elmira, N. Y.



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Whether Student or Expert
this Complete Cyclopedia of

APPLIED ELECTRICITY

will be found useful as a guide and reference work.

This Cyclopedia comprises six big volumes—bound in half morocco—contains 2,896 pages, 7x10 inches—printed on special paper, in large, clear type—2,000 full-page plates, diagrams, formulas, etc. It is written by thirty expert Electrical Engineers—the biggest men in the profession.

THE REFERENCE VALUE IS GUARANTEED by the fact that it is compiled from the text-books used in the correspondence courses of the American School of Correspondence. These practical lessons are arranged for quick and ready reference.

WILL YOU EXAMINE THESE BOOKS FREE OF CHARGE?

If you are interested in Electricity, we know these books are just what you want. To convince you of this, we will send a complete set to you by prepaid express; keep them five days; examine them thoroughly and carefully; test them; apply the knowledge they contain to your every-day work. If you decide to keep them, send us \$2.00 after five days and \$2.00 a month until you have paid the special price of \$18.80. The regular list price is \$36.00. Just fill in the coupon below and mail it to us. The books will be sent to you at once.

Important Subjects Treated—

Theory, Calculation, Design and Construction of Generators and Motors—
Electric Wiring—Electric Telegraph—Wireless Telegraphy—Telautograph—
Types of Dynamos and Motors—Elevators—Direct-Current Motors—Di-
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American School of Correspondence:

Please send Cyclopedia of Applied Electricity for FREE examination; also, T. W. for 1 year. I will return \$2.00 within five days and \$2.00 a month until I have paid \$2.00; or notify you and hold the books subject to your order. Title not to pass until fully paid. R.R. Man's, 11-10.

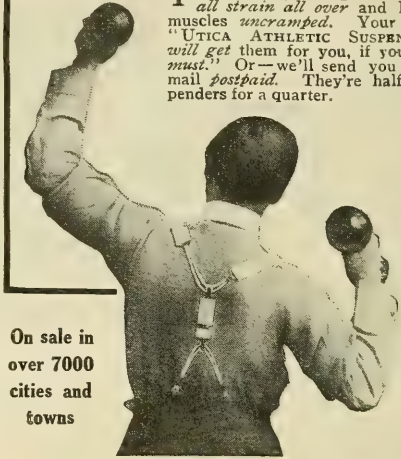
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UTICA ATHLETIC SUSPENDERS

Guaranteed for One Year

THEY bend with you, but they never bind on you. The webbing is as *pliable* in weave as it is *reliable* in wear. You can *stretch* and *stretch*, without the suspicion of discomfort.

THE gliding, sliding back takes away *all strain all over* and leaves your muscles *uncramped*. Your dealer has "UTICA ATHLETIC SUSPENDERS" or will get them for you, if you say, "You must." Or—we'll send you a pair by mail *postpaid*. They're half-dollar suspenders for a quarter.



**PRICE
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On sale in
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We will send for your approval a genuine $\frac{1}{4}$ Karat, commercial white, perfect diamond, in any style 14 karat solid gold mounting, express prepaid, for \$30—\$5 down and \$3 per month; or a 38 Karat diamond of like quality for \$60; \$10 down and \$5 per month.

If you are interested in a reliable watch, we offer a gentleman's O. F. 12, 16, or 18 size, or lady's 6 size, plain or engraved, 20-year guaranteed gold filled case, fitted with genuine Elgin or Waltham movement at \$12.50; \$3 down, \$1.50 per month. With hunting case \$16.75.

Write to-day for free catalog No. T 87 Remit first payment with order or have goods sent C. O. D.

Herbert L. Joseph & Co

Diamond Importers—Watch Jobbers
217-219 (187) State Street, Chicago

The Edison!

The latest style Edison Phonograph in our new outfit No. 10—this superb entertainer, Mr. Edison's latest, final improvement of phonograph, shipped

FREE!

Yes, **FREE!** I don't ask a cent of your money—I don't want you to keep the phonograph—I just want to give it to you on a free loan—then you may return it at my own expense.

Read the Offer: I will ship you free this grand No. 10 outfit, Fireside Model, with one dozen Gold Molded and Amberol records.

You do not have to pay me a cent C. O. D., or sign any leases or mortgages. I want you to get this free outfit—the masterpiece of Mr. Edison's skill—in your home. I want you to see and hear Mr. Edison's final and greatest improvement in phonographs. I want to convince you of its wonderful superiority. Give a free concert; give a free minstrel show, music, dances, the old-fashioned hymns, grand opera, comic opera—all this I want you to hear free of charge—all in your own home—on this free loan offer.

My Reason for this free loan offer, this extra liberal offer on the finest talking machine ever made—see below.

Mr. Edison Says: "I Want to See a Phonograph in Every American Home."

The phonograph is the result of years of experiment; it is Mr. Edison's pet and hobby. He realizes fully its value as an entertainer and educator, for the phonograph brings the pleasure of the city right to the village and the farm home. Now, the new **Fireside Edison Phonograph** of our outfit No. 10, 1910 Model, is the latest and greatest improved talking machine made by this great inventor. If you have only heard other talking machines before, you cannot imagine what beautiful music you can get from the outfit No. 10. **We want to convince you;** we want to prove to you that this outfit is far, far superior to anything ever heard before. Don't miss this wonderfully liberal offer.

My Reason I don't want you to buy it—I don't ask you to buy anything. But I do feel that if I can send you this great phonograph and convince you of its merits, of its absolute superiority, you will be glad to invite your neighbors and friends to your house to let them hear the free concert. Then, perhaps, one or more of your friends will be glad to buy one of these great outfits No. 10. You can tell your friends that they can get an Edison Phonograph outfit complete with records for only \$2.00 a month—\$2.00 a month—the easiest possible payment and, at the same time, a rock-bottom price. **Perhaps you, yourself would want a phonograph,** and if you ever intend to get a phonograph now is the chance to get the brand-new and most wonderful phonograph ever made, and on a most wonderfully liberal offer. But if neither you nor your friends want the machine, that is O. K. I simply want you to have it on a free loan, and perhaps somebody who heard the machine will buy one later. I am glad to send it on the free loan offer anyway. I will take it as a favor if you will send me your name and address so I can send you the catalog. Then you can decide whether you want the free loan. There are no strings on this offer, absolutely none. It is a free loan, that is all. I ask not for one cent of your money, I only say if any of your people want to buy a phonograph, they may get one for \$2.00 a month, if they want it.

Now, remember, nobody asks for a cent of your money I want every household in the country, every man who wants to see his home cheerful and his family entertained, every good father, every good husband, to write and get these free concerts for his home. Remember, the loan is absolutely free from us, and we do not even charge you anything C. O. D.

Write Today for this interesting catalog **FREE**

Write for FREE Edison Catalog

In this catalog you will find a complete list of music and vaudeville entertainments. Get this catalog at once, then you can decide whether or not you want a free loan and when you want it. You can also decide just the music you want. Remember, I will appreciate it as a favor if you will give me the opportunity of sending you this latest style machine—the climax of Mr. Edison's skill—on this free loan offer. **Sign the coupon today.** Do it right now.

F. K. BABSON Edison Phonograph Distributors
Dept. 1108, Edison Bldg., Chicago

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FREDERICK BABSON, Edison Phonograph Distributors, 1108 Edison Block, CHICAGO, ILL.
Without any obligations on me please send your Great Edison Catalog, and also full explanation of your Free Loan Offer on the Edison Phonograph.
Name _____ Address _____
No letter necessary; just sign and mail this free coupon right now.

Just sign and mail the coupon at the right and get this **FREE** catalog. Write today

6171 \$35

6065 \$75

6172 \$40

6255 \$60

6225 \$25

65 \$205

6230 \$50

DIAMONDS ON CREDIT

20% DOWN 10% PER MONTH

Why wait for your Diamond until you have saved the price? Pay for it by the Lyon Method. Lyon's Diamonds are guaranteed perfect blue-white. A written guarantee accompanies each Diamond. All goods sent prepaid for inspection. 10% discount for cash. Send now for catalog No. 97.

J. M. LYON & CO., Est. 1843 71-73 Nassau St., N. Y.

6198 \$30

6200 \$40

6047 \$150

6169 \$25

6233 \$35

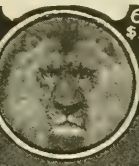
6032 \$40

\$50 6034

6029 \$25

5525 \$25

SOLID GOLD



WANTED AGENTS - SALESMEN WANTED MANAGERS

STARTLING OPPORTUNITY TO MAKE MONEY FAST. AT HOME OR TRAVELING---ALL OR SPARE TIME

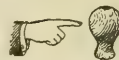
Experience not necessary. Honesty and willingness to work all we ask. We will give you an appointment worth \$50 to \$75 every week. You can be independent. Always have money in abundance and pleasant position selling greatest labor saving household invention brought forth in fifty years. **LISTEN:**—One man's orders \$2,650.00 one month, profit \$1,650.00. Sylvester Baker, of Pa., a boy of 14 made \$9.00 in 2½ hours. C. C. Tanner la., 80 years old, averages five sales to seven calls. See what a wonderful opportunity! Room for YOU, no matter what your age or experience, or where you are located—if you are square and will act quick. But don't delay—territory is going fast. Read what others are doing and be influenced by their success. **WORK FOR US AND GET RICH.**

"I do not see how a better seller could be manufactured," writes Parker J. Townsend, Minn. "Called at twenty homes, made nineteen sales,"—E. A. Martin, Mich. "Most simple, practical, necessary household article I have ever seen" says E. W. Melvin, San Francisco. "Took six dozen orders in four days,"—W. R. Hill, Ill. "Went out first morning, took sixteen orders,"—N. H. Torrence, New York. "Started out 10 a. m., sold thirty-five by 4 o'clock,"—J. R. Thomas, Colo. "Sold 131 in two days,"—G. W. Handy, New York. "I have sold goods for years, but frankly, I have never had a seller like this,"—W. P. Spangenberg, N. J. "Canvassed eleven families, took eleven orders,"—E. Randall, Minn. "SOLD EIGHTEEN FIRST 4½ HOURS. Will start one man working for me today, another Saturday,"—Elmer Menn, Wis.

These words are real—they are honest. Every order was delivered, accepted and the money paid in cash. Every letter is right here in our office, and we will give the full postoffice address of any man or woman we have named if you doubt. This is a big, reliable, manufacturing company, incorporated under the laws of the State of Ohio, and every statement we make is absolutely sincere and true. **YOU CAN MAKE THIS MONEY:** You can make

\$3000.00 in 3 Months

TURNCRANK TO WRING



THE NEW EASY WRINGER MOP

selling this great invention—

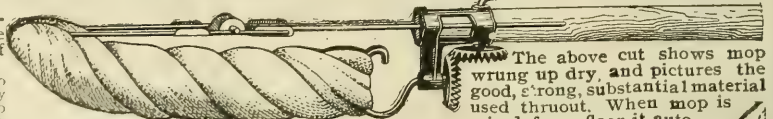
The Easy-Wringer Mop—the biggest money maker of the age. Think of it! A Self-Wringing Mop. No putting hands into the dirty water. No aching backs. No clogging against woodwork. No soiled clothes. No contracting deadly disease from touching hands to filth and germs that come from floor. Can use scalding water containing strong lye. Two turns of crank wrings out every drop of water. Makes house-keeping a pleasure—Makes the day happy. Simple, practical, reliable, it lasts for years. Every woman is interested—and buys. No talking necessary—it sells itself. Simply show it and take the order. Could you imagine an easier, quicker, better way to make money than supplying this demand already created!

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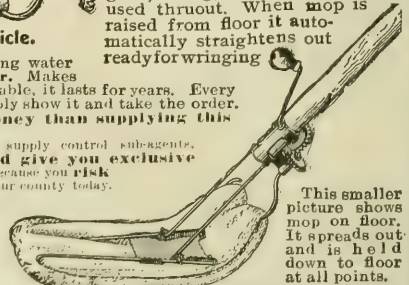
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R.R. Man's 11-10

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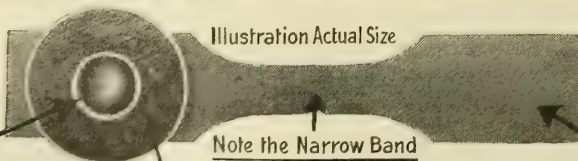
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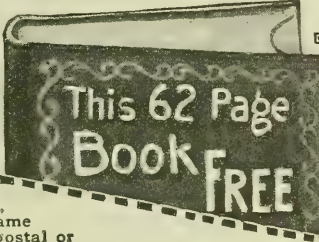
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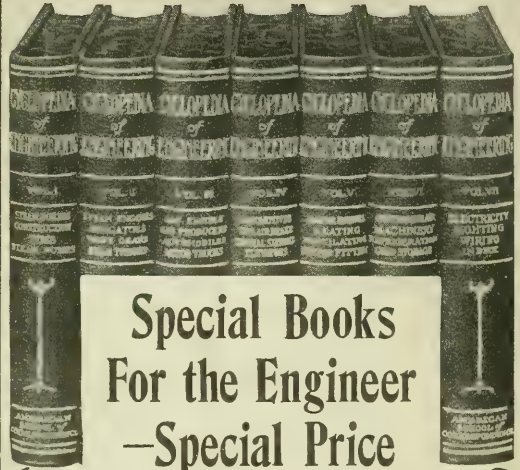
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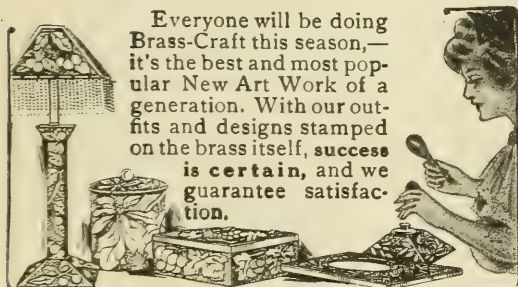
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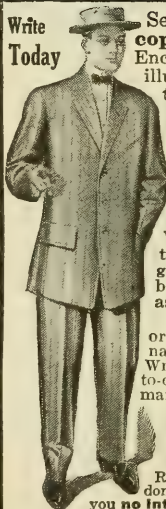
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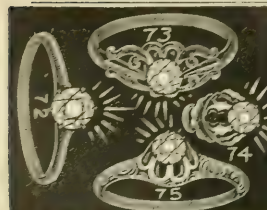
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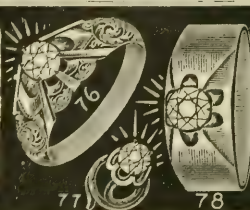
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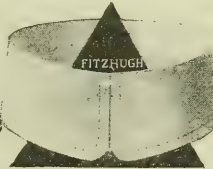
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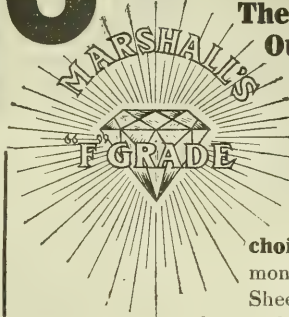
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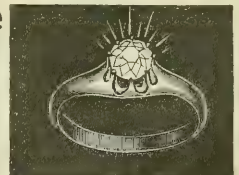
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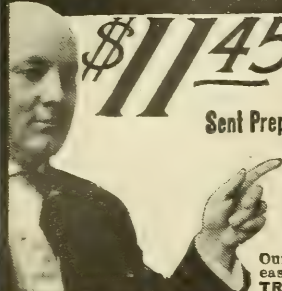
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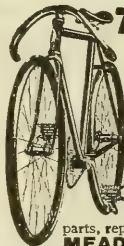
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Make \$4.25 on every sale. New, powerful, double action vacuum cleaning machine. Sells for \$8.50. Weighs 9 lbs.

Easy to carry. Nothing else like it. Does same work as the \$100 kind. **No motors, no electricity.** One person operates.

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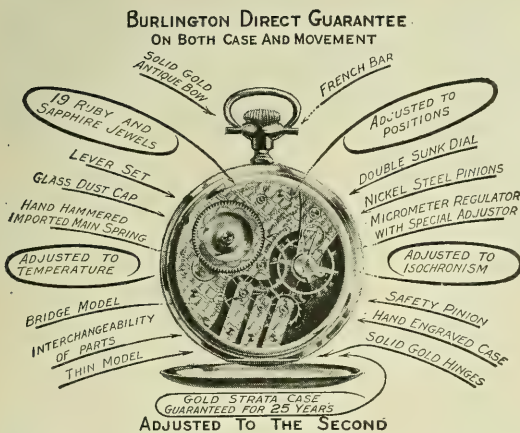
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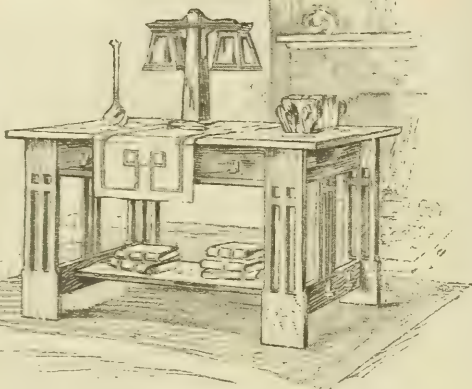
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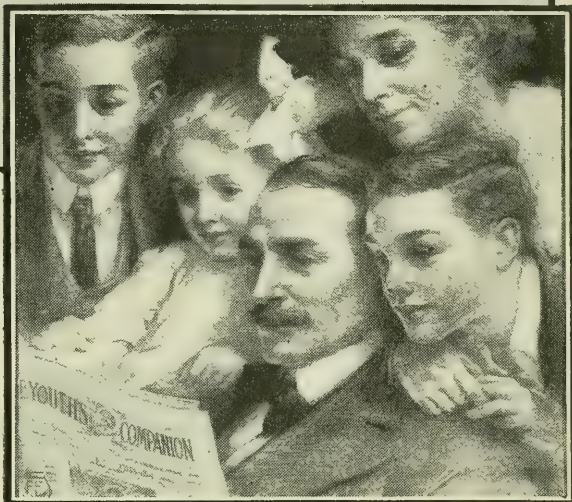
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The Youth's Companion's Art Calendar for 1911, lithographed in
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JM41

Then The Companion for the fifty-two weeks of 1911, reading
equivalent to twenty-seven 300-page volumes of romance, adventure,
science, travel, etc., costing ordinarily \$1.50 each.

THE YOUTH'S COMPANION, BOSTON, MASSACHUSETTS

CLOSING DAYS OF A GREAT PIANO OFFER

January first this year we perfected certain plans for a twelve months' campaign.

These plans involved the placing of at least one Schmoller & Mueller Piano in each new community in the United States.

Up to that time many neighborhoods—many communities—knew about this Sweet Toned Piano.

But where there was one such community—we realized there was doubtless a hundred which knew nothing of the merits of this superior instrument.

Of this piano—which had satisfied music lovers in all walks of life—the humble cottager and family—

As well as those who enjoy more largely of this world's goods.

Thus our problem for this year of grace, 1910—was to make better known the superior qualities of the Schmoller & Mueller Piano.

To bring about its successful introduction into new neighborhoods—new communities everywhere.

We realized at the outset that the task was a large one—one which only a well-organized business institution could successfully bring to a happy conclusion.

Our estimated output for the year was 5,000 Schmoller & Mueller Pianos. Five thousand homes must be found into which we could place a

Schmoller & Mueller Sweet Toned Piano

Five thousand neighborhoods and communities to find—five thousand sales to be made. Had we other than a high grade—a sweet toned—a well-built—a fully guaranteed piano to offer—the task we set ourselves to thus accomplish would have been insurmountable.

But with a piano like the Sweet and Mellow Toned Schmoller & Mueller—with years' record back of it—giving the greatest of pleasure in the homes of thousands of satisfied music lovers—and with a well-organized company to handle the business—this problem was lessened to the question embodying the plan of selling.

We evolved a selling plan which has been most enthusiastically received.

A plan when explained is easily understood by every intending buyer.

Briefly, here is our plan.

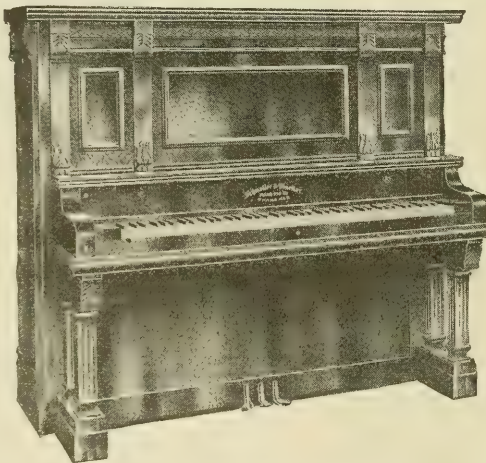
To give the first buyer in each new community or neighborhood this year a Close Wholesale First Buyer's Price.

A Schmoller & Mueller Piano in each community and neighborhood is the best advertisement we desire for our Piano.

One Schmoller & Mueller Piano sold in a new neighborhood has time and again brought about the sale of 3, 4, 5, 6 and more Schmoller & Mueller Pianos—within a short time thereafter.

Giving the First Buyer a Close First Buyer's Price would work to the more surely and quickly accomplish the desired end—the placing of 5,000 Schmoller & Mueller Pianos in that many new communities.

To date the result has been gratifying.



Piano set aside for that many new communities and neighborhoods will have been sold.

Perhaps your community has not as yet welcomed into its midst the First Schmoller & Mueller Piano—

If so—the opportunity is yet before you to buy the best Piano at a price never before heard of as being made on a fully guaranteed instrument.

The least you can do—interested music lover—is to hasten back to us the coupon inquiring for Catalogue and Full Details concerning the First Buyer Introductory Offer.

It is a simple matter to fill that coupon and mail it today.

Remember, we positively guarantee the Schmoller & Mueller Piano for 25 years—we back this up with our entire Capital Stock and Surplus of Half a Million Dollars.

We save you the most money on the Schmoller & Mueller Piano you buy under our present offer and under our plan of payments.

Placing within the reach of all intending piano buyers this Schmoller & Mueller Piano—

No home need longer be deprived of the harmonizing, the educational influences of music.

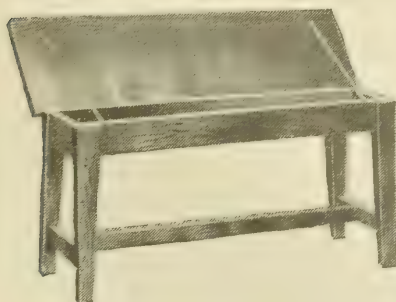
For Fifteen Cents a Day will take care of the small monthly payments we require.

Send the Coupon to us today—don't permit some other music lover in your community to be the First Buyer of a Schmoller & Mueller Piano.

Secure our proposition on a Schmoller & Mueller Piano—delivered to your nearest station.

Send the coupon—if you please—now.

Schmoller & Mueller Piano Co. Capital and Surplus, Half a Million Dollars Omaha, Neb.



This Handsome Bench Free

With every Schmoller & Mueller Piano we regularly supply—free—a stool—a Handsome Stool—a Complete Instruction Book. All orders received from R. R. Man's Magazine this month will include—if desired in place of the stool, the above Handsome Dust Bench. This has a complete music compartment in the top—where sheet music can be kept free from danger of soiling. Bench will be selected to match your Schmoller & Mueller Piano in Creosote, Walnut, Sat. Dongingo Mahogany, or Quarter Sawn Golden Oak. No charge for the bench—if you order this month.

Schmoller & Mueller Piano Co., Dept. AG011, Omaha, Neb.

You will please send to me immediately all information about the Schmoller & Mueller Piano—your First Buyer Proposition and your Complete Catalogue. This involves no obligation on my part to purchase.

Name.....

Address.....

(C)



(A)



(B)



(D)



Thank Your Poor Memory

For This Rare Picture Offer

N. B. Even if "your poor memory" happens to be a fine one you may still accept this offer! Please clip the coupon.

These 1911 "Pompeian Beauties" in colors have proven to be perhaps the most popular set ever offered, and at times we have been fairly overwhelmed. Yet where one person has sent in a coupon, a hundred have reasoned:—

"Too good to be true; they'll have to show me how they can afford to practically give away a 'Pompeian Beauty' for which they claim an Art Store value of at least \$1.50."

It is your poor memory which forces us to make this rare picture offer! Although "Pompeian" is the most widely used face cream, still you—and millions of other busy brain-fagged Americans—either forget entirely the necessity of a completely cleansing and delightfully refreshing product like "Pompeian," or else you can't recall its name when you try.

How to fix the name "Pompeian" in your over-worked memory? That is the question. It is solved, we believe, by resorting to expensive pictures.

Our "Pompeian Beauties" are so fine that people become enthusiastic over them; they are so valuable that people frame them and keep them for years. As one man wrote us—"The 'Pompeian Beauties' are great; the cream fine. You always do what you promise. I shall never forget Pompeian."

Well might the President of this Company say, "Let me win for Pompeian the enthusiasm of America's millions and let me thereby clinch their memory, and I care not what the pictures cost." Since our pictures do make people enthusiastic and do make them

POMPEIAN Massage Cream



All Dealers
50c. 75c. and \$1



remember, then haven't you "been shown" why we can afford to offer expensive pictures for a few cents? The 15c. is charged to protect ourselves from being overwhelmed. We get our reward through years to come. You get your reward at once. Please clip the coupon.

MEN—DON'T—WOMEN

"Don't envy a good complexion; use Pompeian and have one." This is the advice of men and women (in a million homes) that use Pompeian Massage Cream. At all dealers; trial jar sent for 6 cents (stamps or coin). You may order pictures, trial jar, or both.

Our 1911 Pictures. Each "Pompeian Beauty" is in colors and by a high-priced artist, and represents a type of woman whom Pompeian helps to make more beautiful by imparting a natural, clear, healthy complexion.

OUR GUARANTEE. If you are not satisfied that each copy of any "Pompeian Beauty" has an actual art store value of \$1.50 to \$2.50, or if for any reason you are disappointed, we will return your money.

NOTE—The handsome frames are only printed (but in colors) on pictures A and B. All four have hangers for use if pictures are not to be framed. Only artist's name-plate on front as above.

● Pompeian Beauty (A) size 17"x12"; (B) size 19"x12"; (C) size 32"x8"; (D) size 35"x7".

NOTE—Pompeian Beauty D went into a quarter of a million homes last year and the demand for it is still heavy.

Final Instructions: Don't expect picture and trial jar to come together; don't expect reply by "return mail" (we have 20,000 orders on some days). But after making due allowance for distance, congestion of mails, and our being overwhelmed at times, if you then get no reply, write us, for mails will miscarry and we do replace all goods lost or stolen. Write plainly on the coupon only. You may order as many pictures as you wish for yourself or friends.

Read this coupon carefully before filling out your order.

THE POMPEIAN MFG. CO., 171 Prospect Street, Cleveland, O.

Gentlemen:—Under the letters (or a letter) in the spaces below I have placed figures (or a figure) to show the quantity I wish of one or more of the four "Pompeian Beauties." I am enclosing 15c. (stamps or money) for each picture ordered.

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Pictures	A	B	C	D
Quantity				

Name.....
Street Address.....
City.....State.....

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is
Beauty

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Jar



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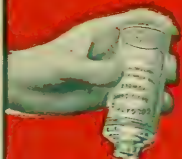
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THE RAILROAD MAN'S MAGAZINE



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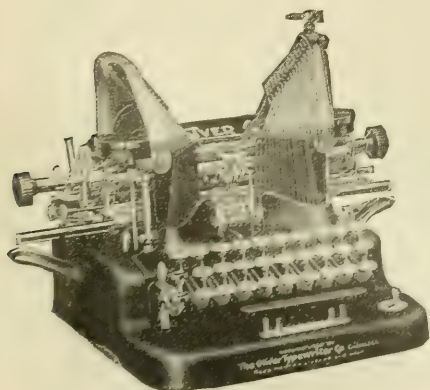
for
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a Day!

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Typewriter

The Standard Visible Writer

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115 Oliver Typewriter Bldg., Chicago

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Name

Address

Town.....State.....

References.....

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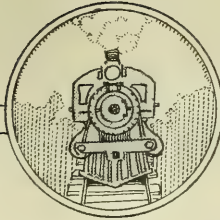
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(53)

The Oliver Typewriter Company
115 Oliver Typewriter Building CHICAGO



THE RAILROAD MAN'S MAGAZINE

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175 Fifth Avenue, New York, and Temple House, Temple Avenue, E. C., London

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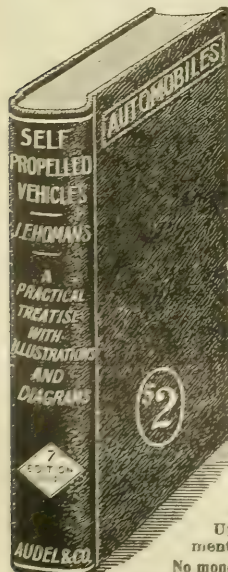
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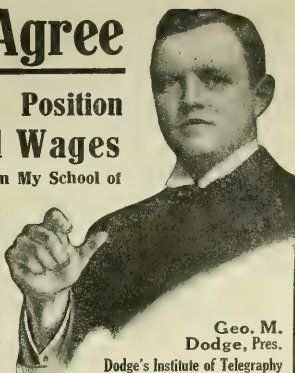
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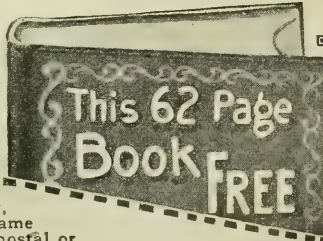


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*Clever Ways to Reduce Table Expenses
Without Skimping on Quality or Quantity*

By MARY JANE McCLURE

Planning seven dinners a week on a limited market allowance is the proposition that confronts the majority of housekeepers.

With a healthy family demanding meat, the problem will be hard to solve unless you borrow some of the arts of our French and German cousins and learn how to cook the cheaper meat cuts appetizingly and utilize every scrap.



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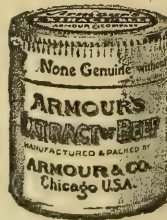
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ARMOUR AND COMPANY
CHICAGO

THE RAILROAD MAN'S MAGAZINE

Vol. XIII.

DECEMBER, 1910.

No. 3.

Edison as a News-Butcher.

BY FRANK MARSHALL WHITE.

THE life-story of the "Wizard of Menlo Park," as the great inventor, Thomas Alva Edison, is popularly called, is one of the most romantic narratives of a man's achievement that the world has ever known. Starting as a news-butcher, or train-boy, on the Grand Trunk Railway, in the baggage-cars of which line he made his first experiments in electricity, he has mounted the ladder of success to a point where his name will remain indelible throughout the ages. He is, perhaps, the most useful man that ever lived.

We give here, for the first time, the complete story of his life days as a railroad employee. During the moments that he was not selling newspapers and peanuts, he was teaching himself the mysteries of the telegraph, which soon directed his budding energies toward what was in those days the almost untouched field of electricity. His early days in a baggage-car were the stepping-stones to some of the most wonderful achievements of all time.

How the Eminent Inventor Planned His Future in One of Uncle Sam's Mail Cars and What He Accomplished Before an Angry Conductor Destroyed His Plant.

IT was at the age of thirteen that Thomas Alva Edison began his career as a train-boy on the Grand Trunk Railway, which led him by way of the telegraph office into the realms of electricity, where to-day, in his mental and physical prime, he stands head and shoulders above the giants of invention that surround him, every now and then bringing forth some new and wonderful achievement of his busy hands and brain, to light-

en man's labor and make his life happier.

Edison's parents at that early period of his life were living in Port Huron, one of Michigan's great lumber centers in the fifties, and the neighbors were not a little surprised when they learned that Samuel Edison, the feed and grain dealer, who lived in the colonial mansion on the government reservation facing the St. Clair River, had consented to allow his son Alva, as the boy was called, to sell newspapers on the Grand Trunk local to Detroit.

While the elder Edison was not a wealthy man, he was well-to-do; for he had made money in lumber as well as in his other business, and his hundred-foot tower which he had constructed on the reservation overlooking Lake Huron and the river, to which the railroads ran excursion trains, also added greatly to his income, so that it could not have been for the sake of money that he allowed his son to go so far from home every day on the long run to Detroit, which was sixty-three miles away.

The fact was that Samuel Edison and his wife were exceptionally wise parents. Otherwise they might easily have extinguished the spark of genius in the boy, for he began to show a capacity for business at an age when the minds of most children, reared under ordinary conditions, would not have risen above play. Wherefore it is well for the world, in which his name is to-day a household word, that Edison had the right kind of parents.

Owes Much to Parents.

Edison's paternal ancestors came to this country from Holland in about the year 1770. Samuel Edison was born in Nova Scotia, where his father had gone after the Revolution, the family subsequently making its home in Canada at a town called Vienna, on the shores of Lake Erie. Here Samuel Edison, at the age of twenty-four, was keeping a hotel, when he married Miss Nancy Elliott, a school-teacher, and the daughter of the Rev. John Elliott, who had been a Baptist minister in the State of New York at the time of her birth, and was a descendant of Captain Ebenezer Elliott, a famous Revolutionary soldier.

Having decided political views, and taking an active part in the Papineau Rebellion of 1837, Samuel Edison was compelled to flee over the border, and hence the United States and not Canada has the honor of being the birthplace of the greatest inventor of his time, which is as it should be, as he comes of American stock on both sides of his family.

Edison was born in Milan, Ohio, in 1847, and his parents settled in Port Huron when he was a boy seven years of age. Although he has developed into a man of abnormal physical endurance, frequently working for twenty-four hours at a stretch without rest or food and capable of enduring all that the strongest and hardest of

his employees can, the inventor was so fragile a child that it was not considered wise to send him to school in Milan. In Port Huron he went to the public school for only three months, which is the extent of his experience within the walls of a school room.

His Love for Books.

Edison had an enormous advantage over the average boy, however, in that his mother had not only been trained as a teacher, but was a woman of extraordinary intellectual attainments and force of character, who found her highest pleasure in establishing the foundation of her son's education. His father also encouraged the lad's early fondness of reading, and paid him a small amount on the completion of the perusal of a book.

Thus, before Alva had reached the age of twelve, he had read Gibbon's "Decline and Fall of the Roman Empire," Hume's "History of England," Sears's "History of the World," Burton's "Anatomy of Melancholy," the "Dictionary of Sciences," and had even struggled with Newton's "Principia," besides mastering the ordinary studies of a boy of his age. He was also fond of stories of romance and adventure, and was so devoted an admirer of Victor Hugo later in life that he was known to his fellow telegraph operators as "Victor Hugo Edison."

It was in their practise of non-interference with young Edison's amusements, that his parents displayed unusual wisdom. When he was only twelve years of age, his father happened to be called in the middle of a winter's night to the part of the house where the boy slept, and was surprised to observe light streaming through the keyhole of his door. Peeping into the room, he saw Alva huddled up in an overcoat, with a scarf tied over his head busy handling a lot of bottles he had ranged on a shelf.

A Child Experimenter.

Some parents would have broken in on the boy and ordered him to bed, and perhaps have thrown out his bottles. Samuel Edison did nothing of the kind. Nancy Edison, also, was more lenient than most mothers, and when her son began at the early age of ten or eleven to conduct chemical experiments in the cellar, leaving bro-

ken glass and evil-smelling liquids about the floor, she was not too quick to interfere.

To be sure, she believed in the efficacy of a switch, as some parents do even at the present stage of civilization, and she finally made young Alva confine his materials and energies to one room in the cellar and put a lock on the door. Here the small boy established a laboratory, with some two hundred bottles in rows on the shelves, all labeled "Poison" in order that they might not be rashly dealt with, and he spent his entire fund of pocket money for chemicals at the Port Huron drug store, with which he made experiments from formulas in Parker's "School Philosophy."

Neighbors of the Edisons, both in Milan and Port Huron, were never quite able to understand the frail-looking boy, with the unusually large, though well shaped head. Indeed, he took so absorbing an interest in matters and things about him from his very earliest childhood, and was consequently so preoccupied when he was not asking what often seemed to his elders ridiculous

questions, that his intelligence was sometimes doubted.

The public school teacher at Port Huron reported that he was addled, and during his three months under her tuition he was generally at the foot of his classes, though when he was only three years of age he was noticed in the village square of Milan, attempting to copy the signs on the stores and shops.

The arguments that young Edison advanced to induce his parents to allow him to sell newspapers on the railroad were, that in addition to his making money for the purchase of chemicals for his experiments in the cellar, it would also be possible for him to read several hours daily between trains in the public library in Detroit, besides being able to bring home newspapers and magazines for the family's perusal.

His father's objections to Alva's going into business at the age of thirteen were more easily overcome than those of his mother, but her consent to the project was eventually gained. The boy was always home at night, the train leaving Port Hu-



IN THE UNUSED SMOKING-COMPARTMENT EDISON BECAME EDITOR, PROPRIETOR, PUBLISHER AND COMPOSITOR OF THE "WEEKLY HERALD."



PEEPING INTO THE ROOM HE SAW ALVA BUSILY HANDLING A LOT OF BOTTLES.

ron in the morning at seven o'clock, and the return train getting back at 9:30 in the evening.

Edison had not been many weeks selling newspapers, periodicals, candy and other small merchandise on the train, when he saw opportunities for profitable trading in other directions. He opened two stores in Port Huron, one for the sale of newspapers and periodicals, and the other for commerce in vegetables, butter, and berries in season, which he brought from Detroit or purchased along the line of the railroad.

A Youthful Employer.

He hired boys of about his own age to take charge of his undertakings in Port Huron, while he was absent on his train or in Detroit.

When the Grand Trunk put on an express to Detroit, Edison obtained permission to have a newsboy in his pay on the train, from whom he exacted a daily accounting. Later an immigrant train was also added to the traffic on the Grand Trunk, which generally carried from seven to ten coaches filled with Norwegians bound for

Iowa and Minnesota. Edison now engaged another boy to sell bread, fruit, candy, and tobacco to the immigrants, from which he reaped a goodly profit.

During his first year on the railroad the young merchant sometimes made as much as \$6 or \$8 per day from his enterprises, and he regularly paid his mother a dollar a day for his board. Edison carried his produce from Detroit to Port Huron in the mail-car of his train.

"I was never asked to pay freight," he says, "and to this day cannot explain why, except that I was so small and industrious, and the nerve to appropriate a United States mail-car to do a free freight business was so monumental."

Edison's second year as a train-boy, 1861, was that of the outbreak of the War of the Rebellion, which made the trade in newspapers brisk. The fourteen-year-old lad not only took full advantage of his opportu-

nities as a dealer, but he actually started a newspaper of his own. The local train between Port Huron and Detroit carried a baggage-car that was divided into three compartments, one for baggage, one for the mail, and the third for smoking.

There were no facilities for ventilation in the smoking-compartment, and hence it was not used. In it Edison installed a printing press he had purchased cheap in Detroit, where it had been used to print bills of fare in a hotel. Procuring an outfit of type, and learning the rudiments of printing from the printer's devil in the office of the *Port Huron Commercial*, the boy now became editor, proprietor, publisher and compositor of the *Weekly Herald*, which was mentioned by an esteemed contemporary, the *London Times*, as the first newspaper in the world to be printed on a train in motion.

A Traveling Newspaper Plant.

The price of the *Weekly Herald* was three cents per copy, or two cents if taken by the month and paid for in advance, and it achieved a circulation of four hundred

copies. It was not dependent for its sales on its novelty in being the work of a small boy on a railroad train, either, but it published news that was of interest along the line of the Grand Trunk road.

Frequently, too, the *Weekly Herald* scored a beat on its contemporaries in Port Huron and Detroit, since, with the assistance of the railway telegraph, Edison often obtained local and war news later than that published in the papers he sold on the train. The profits from his newspaper were as much as \$20 or \$30 per month, in addition to his receipts from his other commercial undertakings.

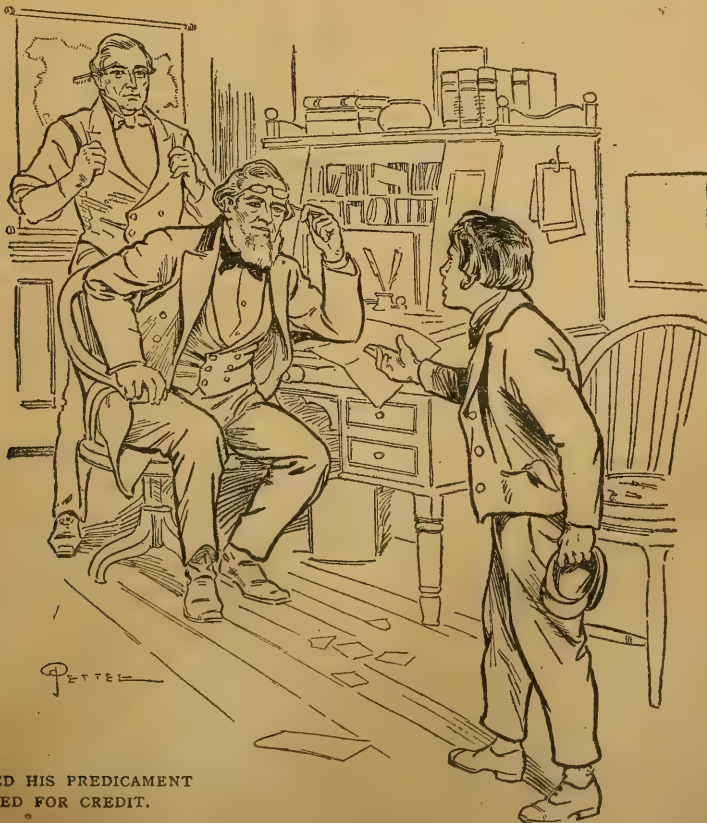
The publication of the *Weekly Herald*, with the demand for papers created by news of the war, made it necessary for Edison to employ an assistant on the train, in addition to the other boys who were working for him. No veteran in the news trade ever rose to his opportunities with more enterprise and greater aplomb than young Edison. It may be mentioned, as illustrative of his attention to details, that he had arranged a jumping-off place from the train at Port Huron.

The train always slowed down at a point about a quarter of a mile from the station, which was nearer his home than the terminus, and where it was therefore more convenient for him to alight. In order not to take an unnecessary chance of injuring himself in jumping from the moving train, he had used his father's horse to haul several loads of sand to the slowing-down place, and made a soft bank to alight on.

How the Telegraph Helped.

When battles occurred during the war, Edison would get the telegraph operator at Detroit to send the news along the line of the Grand Trunk, where he had made arrangements with the local station agents to post bulletins summarizing events, in order that residents might be at the stations to purchase newspapers when the train came through. Operators and station-agents were paid in newspapers and magazines that the boy did not otherwise dispose of.

On the morning of the day that news was received of the battle of Shiloh, in April, 1862, the most terrible thus far since the



HE EXPLAINED HIS PREDICAMENT
AND ASKED FOR CREDIT.

beginning of the war, in which both Grant and Sherman were engaged and Johnston was killed, Edison reached the bulletin boards of the Detroit newspapers soon after the arrival of his train from Port Huron at ten o'clock. He found the offices surrounded by horror-stricken crowds, for the bulletins declared that 60,000 men had already perished, and that the battle was still raging with its outcome uncertain.

The boy realized that there would be an unprecedented demand for newspapers that day all along the Grand Trunk line between Detroit and Port Huron, are more particularly at the end of the road. His usual practise was to carry a hundred papers on his train, but he estimated that he would undoubtedly be able to sell a thousand in view of the excitement caused by the battle.

When Edison Raised the Price.

The first thing to be done was to get out his bulletin, and to effect this he promised the telegraph operator a weekly magazine for three months. And now a tremendous obstacle arose! He did not have enough money to purchase a thousand papers, and he was not acquainted with any one connected with their issue. However, he could not let so great an opportunity slip without at least making an attempt to take advantage of it, and young Edison walked into the editorial rooms of the *Detroit Free Press*, whose destinies were then presided over by no less a personage than Wilbur F. Storey, who afterward founded the *Chicago Times*.

To Storey and one of his associates the boy of fifteen stated his predicament, explaining that he had already telegraphed the news of the battle to all the stations along the Grand Trunk Railroad between there and Port Huron, and that he had only sufficient money to purchase a hundred papers, while he was sure he could sell a thousand. Would the *Free Press* give him credit until the following day? The other man was of the opinion that the risk was too great, but Storey overruled him, and Edison was given the full number of papers he asked for.

"By the aid of another boy I lugged the papers to the train and started folding them," said Edison, in telling the story. "The first station, called Utica, was a small one where I generally sold two papers. I saw a crowd ahead on the platform, and

thought it some excursion, but the moment I landed there was a rush for me. Then I realized that the telegraph was a great invention, for I sold 35 papers there. The next station was Mount Clemens, now a watering place, but then a town of about one thousand. I usually sold six to eight papers there.

"I decided that if I found a corresponding crowd there, the only thing to do to correct my lack of judgment in not getting more papers was to raise the price from five cents to ten. The crowd was there, and I raised the price." At Port Huron the populace was waiting for him at his jumping-off place. Says Edison: "I then yelled, 'Twenty-five cents apiece, gentlemen! I haven't enough to go around!' I sold all out, and made what to me then was an immense sum of money."

While this extraordinary boy was thus conducting money-making enterprises with a degree of success perhaps unprecedented in one so young, he was devoting every spare moment to study. He had not been many weeks on the Detroit train, when he began to transfer his laboratory from the cellar at home to the smoking compartment of the baggage-car, where he afterward established his newspaper office. As he had considerable leisure during the three hours run each way, he gave himself to experiments, for which Fresenius's "Qualitative Analysis" was the basis, spending the greater part of his earnings for chemicals.

Too Much for the Conductor.

When his train arrived in Detroit in the middle of the forenoon, it was his practise to go at once to the public library, and he often spent the entire day within its doors, until the return train left at about six in the evening. It was here that he adopted a novel plan of study, selecting a certain section of the library and starting to read it through shelf by shelf, without regard to subject matter.

However, Edison's laboratory on wheels was not destined to permanence, and with its end there came upon him an infliction that to a man of lesser mental resources would have been a terrible calamity. One day a lurch of the car jarred a stick of phosphorus from a shelf of the laboratory in the baggage-car, which falling to the floor set the woodwork on fire. While the badly frightened boy was attempting to

stamp out the flames, the conductor of the train, a hot-tempered Scotchman, rushed in with a pail of water with which he extinguished the fire, after turning on the lad and striking him a violent blow on the ear.

When the train reached Mount Clemens, the next stop, Edison and all his possessions, including his laboratory and his printing plant, were put out on the station

other operators, I was not bothered by the other instruments. Again, in experimenting on the telephone, I had to improve the transmitter so I could hear it. This made the telephone commercial, as the magneto-telephone receiver of Bell was too weak to be used as a transmitter commercially.

"It was the same with the phonograph. The great defect of that instrument was the rendering of the overtones in music, and the



TURNING ON THE LAD AND STRIKING HIM A VIOLENT BLOW ON THE EAR.

platform and left there. Since the moment he was struck by the angry conductor Edison has been deaf, but it is characteristic of his philosophy that he bears no malice toward the man who wrought him this irreparable injury. Indeed, the inventor even argues that his infirmity has been of benefit to him rather than otherwise.

Loss of Hearing No Detriment.

"This deafness has been of great advantage to me in various ways," he tells his friends. "When in a telegraph office, I could hear only the instrument directly on the table at which I sat, and unlike the

hissing consonants in speech. I worked over one year, twenty hours a day, Sundays and all, to get the word 'specie' perfectly recorded and reproduced on the phonograph. When this was done I knew that everything else could be done, which was a fact. Again, my nerves have been preserved intact. Broadway is as quiet to me as a country village is to a person with normal hearing."

Although the father of the great inventor once said that he never had any boyhood days in the ordinary sense, there seems to have been considerable of the spontaneous boy about Edison during the period that he was selling newspapers on the train, and

studying and experimenting during most of his spare hours. An incident Edison relates himself is illustrative.

"After the breaking out of the war," he says, "there was a regiment of volunteer soldiers quartered at Fort Gratiot, the reservation extending to the boundary line of our house. Nearly every night we would hear a call, such as 'Corporal of the guard, No. 1.' This would be repeated from sentry to sentry until it reached the barracks, when the corporal of the guard, No. 1, would come and see what was wanted. I and the little Dutch boy, after returning from the town after selling our papers, thought he would take a hand at military affairs.

"So one night, when it was very dark, I shouted for the corporal of the guard, No. 1. The sentry, thinking that it was the terminal sentry who shouted, repeated it to the third, and so on. This brought the corporal along the half mile, only to find that he had been fooled. We got him out three nights, but the third night they were watching, and caught the little Dutch boy, taking him to the lock-up at the fort, where they shut him up. They chased me to the house.

"I rushed for the cellar. In one small apartment there were two barrels of potatoes and a third one nearly empty. I poured these remnants into the other barrels, sat down and pulled the barrel over my head, bottom up. The soldiers had awakened my father, and they were searching for me with candles and lanterns. The corporal was absolutely certain I was in the cellar. He couldn't see how I could have gotten out, and wanted to know from my father if there was any secret hiding place.

"On the assurance of my father, that there was not, he said it was most extraordinary. I was glad when they left, as I was cramped, and the potatoes that had been in the barrel were rotten and violently offensive. The next morning I was found in bed, and received a good switching on the legs from my father, the first and only one I ever received from him, although my mother kept a switch behind the clock that had the bark worn off. My mother's ideas and mine differed at times, especially when I got experimenting and mussed up things. The Dutch boy was released the next morning."

Another boyish adventure that resulted in a black eye is recalled by Edison, in

connection with the visit to America of the Prince of Wales, afterward King Edward VII.

"Great preparations were made for his reception at Sarni, the Canadian town opposite Port Huron," the inventor says. "About every boy, including myself, went over to see the affair. The town was draped in flags most profusely, and carpets were laid for the prince to walk on. There were triumphal arches and a stand was built above the general level, where the prince was to be received by the mayor. Seeing all these preparations, my idea of a prince was very high, but when he did arrive I mistook the Duke of Newcastle for him, the duke being a fine-looking man.

"I soon saw that I was mistaken and that the prince was a young stripling, and did not meet our expectations. Several of us expressed our belief that a prince was not much after all, and said that we were thoroughly disappointed. For this one boy was whipped, and soon the Canuck boys attacked us Yankee boys, and we were badly licked. I myself got a black eye. That has always prejudiced me against that kind of ceremonial and folly."

It is probable that had it not been for his experience as train-boy that brought him into association with the telegraph, Edison would have devoted his great talents and energy to chemistry, which was the first bent of his great genius, rather than electricity.

However, the observant and intellectual lad of fourteen could not witness daily the transmission of messages along the magic wire without determining to master the telegraph himself, and, with the assistance of another Port Huron boy who was also anxious to learn the art, wires were strung between their homes.

The first telegraph line over which Edison worked was made of stove-pipe wire, with bottles for insulators, and trees for poles, and upon it the students practised sending and receiving after the train-boy came home at night.

The boy applied himself to the study with his usual enthusiasm, hiring a substitute to take his place for a part of the trip on his train, and devoting no less than eighteen hours per day for four months to the mastery of the wire. Before he was sixteen years of age, he was night operator at Stratford Junction on the Grand Trunk in Canada.

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"Kindly cut any further attentions to Jessie Jones!" admonished Sanderson.

Sanderson was foreman of the Rancho Bonita. Big of muscle and big of determination, he felt that he had a prior claim on all the beauty in the immediate neighborhood.

The gentleman to whom he put the curt remark—Dick Kenny—was the head vaquero. Jessie Jones was the Eastern schoolma'am. She had taught the district school down at Bridgeport for two seasons now, and her quiet, unassuming, innocent presence had caused more trouble in the neighborhood of that prairie town, in the short time that she had been there, than any of the dozen shootings, stage hold-ups, poker fights, or other phases of local excitement.

When the boys heard that an "Eastern schoolma'am" was coming to take the place of the patient but consumptive male teacher who had finally succumbed to his malady, they pictured in their minds a somewhat different creature than Jessie Jones.

They had read somewhere that the average schoolma'am is tall and angular, middle-aged and unmarried, spectacled and skinny. They pictured the "happy" time that she would have in wild and woolly Bridgeport. They heralded her coming with jeer and jibe, and wondered if any man in the county would marry her.

But when Jessie Jones stepped off the train! When her trim little twenty-five years landed on the Bridgeport depot, and

she faced the bunch of staring cowpunchers and the three dozen children whose destiny she was to shape, more than one husky son of the saddle felt a queer and unaccustomed sensation in the region of his heart.

There she was! Dark hair and dark eyes, the most bewitching face that beamed with smiles, and just the daintiest hands and feet.

And her dress! Buck Nevins said afterward that it "looked like it was made out of the clouds." As for her hat—fluffy and modish and full of flowers—Jim Lupton said it "looked as purty as a brindled heifer in a sunflower patch," which comment, in the mind of Jack Sanderson, was the "convolution of a chimpanzee."

From the day of her arrival, things took a different turn in the neighborhood of Bridgeport. Jack Sanderson, the dashing young foreman, usually as perfect in his dress and deportment as a plainsman can be, was somewhat more perfect than usual.

Buck Nevins sent to St. Louis for a safety-razor, which he dulled every day.

Jim Lupton hiked him out to the foothills and trapped a grizzly, so he could boast of the best pair of chaps in the county.

Sandy Peters concluded that his "book-l'arnin'" had been sadly neglected in his early youth, so now—at thirty-three—he actually enrolled as a pupil.

Dick Kenny suddenly took a deep interest in those fashion-plate young men who appear in such swell-fitting clothes in the advertising pages of the magazines, so he had his measure taken and sent East for a regular college-cut creation.

When it came, it was certainly the smartest-looking thing between the Missouri River and the Nevada boundary-line. Dick donned it every night and every Sun-

day, and he even sent to Chicago for a box of rubber collars, which he wore with his blue-and-red shirts. With his top-boots polished to a mirror, his sombrero carefully brushed and tilted over his right ear, and a wild rose adorning his lapel, he was "all to the clothes and then some."

Jessie Jones took up her abode in Bridgeport with the family of old Sam Manning, who had lived there back since the seventies, and was considered everything from the fount of wisdom to the court of last resort. He was judge and jury, mayor and Moses.

He noticed with twinkling eyes how the young bucks of the ranges, one by one, had called to pay their respects to the pretty teacher, and how every one, from Jim Lupton with his grizzly chaps to Buck Nevins with his safety-razor, had been gently but firmly placed in the discard.

The trouble with Jim's *chaparejos* centered in their newness. In other words, they were a little too "gamey." Jim hadn't let them hang long enough, and on the several occasions when he called, Jessie couldn't help but observe that his protestations of love were more evident to the nose than they were to the ear—so she passed him up.

Buck Nevins's razor rebelled at the most unfortunate moment. It seems that Buck hadn't shaved for some time, and he had grown the finest specimen of wind-destroyers in four counties. Not only were these whiskers wonderful in length and thickness, but they were tough and wiry, too; so much so, indeed, that when Buck had shaved just half of his face something was wrong with the razor.

It wouldn't work. Somewhere in its delicate mechanism there was a break. For the life of Buck, it wouldn't mow down another hair. He tampered with it, oiled it, put in blade after blade, and cursed it with choice contumely, and still it wouldn't cut. As the human "before and after" advertisement, he had no show for the little school-teacher's hand.

So the game narrowed down to a two-handed affair, with Jack Sanderson and Dick Kenny running neck and neck. Jack proffered his natural, simple, sturdy self and the learning that he had gained at a Middle-West University. He was a glib and fulsome talker. He was the only man besides old Sam Manning who was sufficiently versed in politics, literature, and cattle diseases to talk with ease and safety.

Many and pleasant were the conversations that he had with Jessie Jones. Her Smith College brand of learning blended nicely with his Mississippi Valley erudition, and they found much in common. Jack believed that his brains would ultimately win for him—that after some evening when he had shown superior prowess as a provider of information, Jessie would listen to a proposal and nab him on the spot.

Dick, on the other hand, had developed a hunch for the power of clothes over college culture. Regaled in his Eastern "side-boards," to which he had added the glory of a boiled shirt and a pair of patent-leather shoes several sizes too small for him, the road to happiness lay clear and straight before him.

Whenever he met Miss Jones—whether on the highway or in the Manning parlor—he would begin on the advantage of knowing how to dress, and the change that was sure to come in the cowboy and his clothes.

Finally, this subject began to cloy on the little schoolma'am. It was evident to Dick, before many moons had passed, that he was running behind Sanderson instead of forging ahead. Jessie was surely losing interest in him, while Sanderson was calling early and staying late.

One night he did the ungentlemanly thing of following Sanderson surreptitiously to the Manning door. When Sanderson entered, it was about eight o'clock; when he took his departure, it was almost midnight.

Dick had not gone out of eye-sight of the front door, and he was convinced.

Sanderson must have something to talk about, thought Dick, for when he (Dick) called at eight, he found that he could not muster up sufficient conversation to keep the evening from dragging. At nine o'clock, he was generally ready to say good night—and so was Jessie. Beyond all peradventure, he was losing.

He resolved that he would get a book, read it, and then discuss it with Miss Jones. But where would he get a book? What book was worth reading? Should he send East for one? Who would he send to? And how would he know if he were securing the latest novel or a treatise on hares and their habits, if he did send for one?

These questions perplexed his mind and made him forget his clothes.

Ah! He had an idea. He would ask Miss Jones. She had books, and she could lend him one.

—“Here is Kipling's ‘Plain Tales from the Hills,’” she said a few nights later, as she went to the little book-case in response to his request.

“Geel! I like them frontier stories,” said Dick, as he took the volume.

But the East Indian masterpieces of the Englishman were a bit too much for the cowboy. It is painful to say so, but Dick Kenny had never been much of a reader, and when it came to Kipling, he was plainly stumped. But he had to make good.

Bing! Another idea!

He would go to Miss Jones, confess his inability to understand Kipling—and ask her to read the stories to him. They would discuss them as they went along and, perhaps, it would be necessary for him to stay until midnight and after.

Jessie was willing. Why shouldn't she, the district teacher, be willing to help any one who was trying to improve his mind? So, for several nights, she read and explained and analyzed, and her sweet voice and ready intelligence were as a great light to the Beau Brummel of Bridgeport.

He was a changed man. Literature, after all, was his bent. He would read or bust! He became unusually satisfied with himself; he was not so bilious a *hibelot* as he looked, and he named his new pony “Kip.”

The literary nights kept up. In a short time he had Jack Sanderson on the hip.

Sanderson heard of it, and he didn't quite like it. He surmised that Jessie was taking more interest in Kenny than was good for the Sanderson chances. It was time that he took a hand in the matter. He must put a stop to any further manifestation of Kenny's culture.

That is why, after one thing had led to another, and one epithet had brought forth a succession of abuses, Sanderson landed on Kenny and remarked:

“Kindly cut any further attentions to Jessie Jones.”

When Sanderson delivered this ultimatum, he and Kenny were just outside the big horse-barn of the Rancho Bonita. Kenny, with two other vaqueros and four collies, had made a *rodeo* of five hundred fat steers for shipment to Chicago, and Kenny had just put up “Kip” and was about to regale himself in his store-clothes when Sanderson accosted him.

The blow was a surprise to Kenny. He didn't think that Sanderson meant business quite so thoroughly. It was evident that

the foreman felt keenly that the head vaquero was becoming more to Miss Jones than a clothes-horse.

Kenny went to the ground. Sanderson, with clenched fists, stood over him, ready to strike again. Kenny rose to his feet.

“So that's the way you feel about it?” he said.

“That's the way,” replied Sanderson, “and that's the way I'll continue to feel about it. Don't forget!”

“I'll get even with you yet,” said Kenny. “And if you have no objection, I'll quit this job now.”

“I've no objection. You saved me the trouble of firing you,” Sanderson replied.

He couldn't but feel that the loss of his head vaquero was something to be deplored, however, for Dick Kenny was far and away the best man on a horse within a mighty radius, and he could have a job on any ranch for the mere asking.

Kenny turned and walked to the ranch-house. Packing his precious apparel in a carpet-bag, he returned to the stable for “Kip.” The pony was his own property and he needed him. He mounted, hung the carpet-bag on the horn of his saddle, and rode into Bridgeport. “Kip” was lodged in a stable, and his master engaged a temporary room over Skin Mealey's drinking and dancing emporium.

“I'll give that dub the ha ha!” he exclaimed aloud, as he sat on the edge of his bed, broom in hand, putting his glad rags in shape for the night. “If he thinks that he can put it over this gent and get next to that gal—he's got another think comin'.”

The broom stopped its whisking. The clothes lay limp on his lap. Dick Kenny was looking straight ahead.

Bing! Another idea!

“Ah, ha!” he exclaimed, as he arose. “I have it! I'll go to her to-night and ask her to elope! She'll do it! She'll do it! She'll do it!” he added with a smile of assurance.

“I'll get fixed up in my very best, and, to add to the spell, I'll go over to McNulty's and get me a hair-cut. Jessie Jones is going to be Mrs. Dick Kenny, or I'll be shot full o' holes.”

With this say-so out of his thought dome, Dick hustled over to McNulty's, intending to get shorn of his locks first. Then he would return to Mealey's, talk with the boys for a spell, sit in a game or two, and then—a bath, his new clothes, and her.

He was pleased with himself. So pleased, indeed, that he stopped at the general store and purchased two kinds of St. Louis perfume. One bore the euphonious name of "Yangipangi," and the other was branded "Pride of the Dell."

He applied both at once. The "Yangipangi" would be just the thing for his red bandanna, and as for "Pride of the Dell," he would rub that on his hair and his hands and a few drops sprinkled here and there on his clothes, and Jessie Jones would annex him quicker than a hungry sea-bass gobbles a fly.

About seven o'clock his toilet was complete. What remained of the two bottles of cologne wouldn't have perfumed a fly. Dick had all but bathed in it. The twilight was just touching the dimness of night when he sauntered forth in the direction of the Manning mansion. It was a little early for a caller to put in an appearance, perhaps, but this was the night of all nights! He would be the early bird to catch the young lady.

As he sauntered along the highway to the object of his young love, his spirits were gay and his heart outstripped his fleeting footsteps. That he looked pretty good he was certain; that he smelled better, he was positive.

He noticed, however, that every person who passed him detected the perfumes, and several made some idle remarks, accompanied by a rather loud "phew!"

Jessie had not finished her dinner. He would wait.

He took a chair in the parlor. He did not anticipate waiting so long; but, he surmised, the folks had just sat down to the evening meal when he arrived. Presently he began to notice that the parlor was somewhat stuffy. The scent was a trifle nauseating. Maybe it would be best to open a window. In deference to his host he could not perform so impolite an act.

He arose and walked briskly and quietly to and fro, hoping that the odor might diminish a little; but the action only seemed to stir it up to greater density. He was deeply chagrined and surprised when the mayor's youngest daughter appeared at the parlor door with her handkerchief to her nose and closed it. Then he did open the window.

Just as he was beginning to realize that he had made a fatal mistake in getting the perfumes, the door opened and Jessie appeared.

"Dick," she said, "it is good of you to come so early."

There was a peculiar smile on her face that he didn't quite like. It gave him an uneasy feeling. She was onto him.

"Jessie, I came early, because I have an important matter on me mind," he said, straight from the shoulder.

"Indeed," replied the little lady. She smiled and then fairly burst into laughter which smote Dick Kenny to the heart. It wasn't the laughter of great gladness over his early arrival and devotion. It was the laughter of one who was amused at the antics of an unconscious fool.

She checked herself, and then said:

"Perhaps you want to take up another volume of Kipling, or discuss the one we have just read?"

"I want to read every book in this world with you," said Dick. Fervor was written on his brow; determination was in his heart!

"It would take a long time to do that," Jessie answered.

"Jessie!" He stepped closer to her. The perfume, instead of exerting the hypnotic influence he had anticipated, acted as a repellent. Jessie stepped back.

"Jessie!" he said, again. "Don't go away from me!"

Before she was aware, he caught her forcibly in his arms and held her close to his perfumed breast. She tried to struggle free, but she was as a baby in the grip of a giant.

"Jessie," he said, putting his face close to hers, "I love you. I love you. I love you better than any man on the grange. I want you to elope with me, to-night!"

The perfume and the sudden proposal were too much for the girl. She fainted.

She fainted dead away in his arms. He had paused a moment for a reply, and he noticed that her body was limp. He tried to raise her head, but she was ghastly white. Her head fell back on his arm. Heavens! but she was beautiful. If he hadn't been half scared to death, he would have kissed her. Instead, he carried her to the sofa and gently laid her down.

"Jessie!" he cried. "Jessie! I didn't mean—Jessie! Jessie!"

He rubbed her hands and stroked her forehead. He spoke her name again and again. She did not move.

Fright had him in its grasp. He looked around. A chill ran down his spine. Cold sweat dotted his face. Suppose some one

should enter the room and find him in that awful predicament!

He rushed to the door and flung it open.

"Judge, judge!" he yelled. "Come quick! Jessie has fainted!"

Old man Manning was enjoying a pipe and a final cup of coffee. Dick's startled cries brought him to his feet. He dashed into the parlor. Jessie was coming to. Her face twitched; her eyes opened; her hands moved. The judge was at her side, and Dick, remembering that water was a necessary adjunct to a fainting-spell, despatched one of the Manning children for a bucketful.

The two men brought Jessie around. She sat up and smiled. Dick started to apologize.

"Say!" roared the judge, interrupting him. "I don't wonder that she fainted! Where on earth did you get that extract of sewer you've got on you? When you came into the house to-night, I thought you'd stepped on a skunk! Now, for the love of Mike, go home and get fumigated! The next time you come to this house with that bunch of smell on you, bring an odorless excavator!"

"It's only cologne!" said Dick, so timidly that one might have taken him for a little child.

"Cologne!" roared the judge. "It's worse than a tannery in the middle of summer. Gee whiz! The night that Jim Lupton came here with those fresh-killed chaps was nothing compared to this!"

He rushed to the windows and opened them all wide. Jessie, by this time, had so fully recovered that she was able to talk, but not without the rapid accompaniment of a fan to keep the atmosphere in motion.

"What were you saying to me when I fainted, Dick?" she asked.

"I forget now," replied the unhappy cowman. "I'm sorry that—that I came to-night." Turning to the judge, he added: "I guess you're right about the cologne, judge. I'll go home and have it taken out."

He took his hat and bowed a sad good night. His heart was heavy. As he made his way slowly along the road, he grew so angry with himself that he stopped under a tree to commune.

"Of all the prime-fed Jonahs, you're it," he said, tapping his chest.

Some cowmen, returning home from Skin Mealey's, passed him as he stood there. He noticed that they sniffed the air disdain-

fully as they passed, and several uttered a very significant "Whew!"

"The next man who says that is going to get a wallop," said Dick to himself, as he clenched his fist. "So help me, Bob, the very next guy who remarks about this perfume—I'll land on him good and plenty!"

He wandered down to Skin Mealey's. The bar was in full swing. The faro-tables were crowded, and the poker-games and three-card layouts were in full blast. Two days previous was pay-day on the range, and many of the boys had come in to have a time.

Dick stepped up to the bar. After his dire failure to win Jessie Jones, he needed a bracer, and he gave the man behind the bar the signal for red liquor.

The bottle and a glass were passed to him. He filled the glass to the brim.

"Want a bath?" asked the bartender, as he grabbed the bottle. "Perhaps you would like me hand you out a piece of soap and a towel."

Dick was just preparing to hand back a bit of sass himself, when, loud and long and lingering, came that fatal exclamation of disgust:

"W-h-e-w!"

Dick brushed the glass aside. Stepping to the middle of the room, he said so loud that all could hear:

"Who said that?"

Calmly he began to peel off his store coat and vest and roll up his sleeves. He threw the garments on a chair. His six-gun gleamed bright in his hip-pocket, and, as a sign that he wanted to fight with his fists only, he laid it on the bar.

"Who said that?" he repeated.

Jack Sanderson rose from one of the tables.

The two men glared.

"What do you want to know for?" asked Sanderson.

"Because I'm going to punch the man who said it. Did you?"

"Perhaps I did, and perhaps I didn't," said Sanderson.

"If you say you didn't, you're a liar!"

Dick had to punch some one that night, and he would rather punch Jack Sanderson than any other man in the world.

"Liar" was the one word in that part of the country that could not pass unnoticed. Under any other condition, Sanderson would have been justified in drawing

his gun; but, as he had seen Kenny disarm himself, it had to be a matter of fists.

Sanderson stepped in front of Kenny.

"Did you mean that?" he asked.

"Yes; and I say it again."

Kenny was sure of the first blow this time. He wasn't to be caught off his guard. He landed clean on Sanderson's jaw.

It was a pretty fight while it lasted. Kenny was so very angry that his strength was greatly augmented. He drew the first blood. In short, he pummeled the big one so vigorously that Sanderson feared his reputation was at stake.

Once or twice Sanderson landed hard on the vaquero's face—so hard, indeed, that he thought Kenny would go down for the count. But Kenny was in the mood for punishment so long as he could give it in return. The men clenched, and he managed to get Sanderson's head under his arm.

Sanderson, in this position, could only administer a few light blows; but Sanderson's face was just where Kenny could use it as a punching-bag for his right fist. He swung on the foreman eight or ten times unmercifully, then he grabbed him by both shoulders and flung him back into the crowd.

Several men supported Sanderson. It was plain that he was not the victor. Anger was mirrored in his bleeding face. He clenched his fists and wanted to make for Kenny again, but his friends held him.

Kenny was breathing hard, but the smile of the winner played around his lips. Going close to his antagonist, he said:

"I just want to ask you one question, *Mister* Sanderson. Do I have to cut my attentions to Jessie Jones?"

There was a tremendous silence. Every man in the place knew now the real cause of the fight.

Sanderson couldn't speak. A mighty chagrin overpowered him. No longer was he the hero of the range. In the eyes of the very men who had regarded him as the invincible of the invincibles he had gone down to a defeat that was as disgusting as it was disgraceful.

If he said "Yes," he would prove himself the most hated thing of the plains—a coward; if he said "No," then Kenny would beat him until he begged for quarter.

There was no more battle in him. He wished that it had been gun-play and he had been killed.

Dick Kenny repeated the question. He

was standing over the beaten man, who hung his head and answered not.

"Well, you big stiff," said Kenny, for he was willing to add insult to injury, "I'll speak to her whenever I want to and just as often as I please; and I'm going over to where she lives early in the morning and ask her to marry me.

"I think she likes me a whole lot better than she likes you, and I think that when she sees your face she'll pass you up for a cheap dub who can only hit a man when he isn't looking."

"Cut it out, Kenny," said Mealey.

Kenny picked up his coat and vest and put his six-gun in his pocket.

"I'll treat every man in the room—except one," he remarked, looking squarely at Sanderson as he spoke the two last words.

He threw two shining twenties on the bar. "Set 'em up, Skin—and keep the change," he said.

Skin Mealey was too good a business man to let any money slip by. With the help of his bartender, he began to fill the orders. Every man present save one or two accepted the vaquero's invitation, and those acted as an escort to Jack Sanderson, who stepped out and vanished in the night.

Dick Kenny went to his room. He went to bed, and, tired from the strenuous night, he fell asleep. When the first bird twittered he awoke. Instead of donning the famous store-suit, the boiled shirt and other fashionable trimmings, he dressed himself in his cowboy outfit and felt more natural and more at peace with himself.

Rolling the store-suit and the two empty bottles that had contained the troublesome cologne in a tight bundle, he took them down-stairs.

"Here," he said to one of Mealey's help, passing him a silver dollar, "take these and bury them. And be sure you bury them; for if I ever see them on any human being, there'll be trouble."

He breakfasted and bided his time until he could go to Jessie.

Judge Manning greeted him heartily.

"Well, judge," he said, "I've discarded them clothes and them perfumes. And I've got some sense."

The judge smiled in approval.

"Is Miss Jones in?" asked Kenny.

"No," replied the judge. "It seems that Jack Sanderson got in a mix-up down at Mealey's last night and got the worst of it. She's gone up to his house to nurse him."

"FELLOW-CITIZENS," CALLED OUT JIM TO THE GANG, WITH ORATORICAL EFFECT, "THIS HERE'S FURGESON. HE'S RUNNING FOR PRESIDENT—"



Observations of a Country Station-Agent.

BY J. E. SMITH.

No. 31.—The Wily Politician May Think that He Carries the Railroad Vote in His Vest Pocket, but the Railroad Man Isn't Quite so Foolish as Some People Imagine.



THE "Ides of November" have come and gone. That has a nice mortuary sound, a certain ominous ring of portending disaster. During carnival week in Rome a soothsayer soto-voiced to Julius Cæsar, "Beware the Ides of March," as at, in, or around that portentous date "he would get his." Next to the "Ides of March" we are forewarned of the "Ides of November."

The political orators do this. They do it with great gusto and acclaim.

Have they not been going about the public places for the previous two months uplifting their voice and imploring the people to beware "The Ides of November?"

There isn't any period fraught with such dire calamity, according to the politician, as the "Ides of November." Because about that time the people vote him out and the other fellow in. The country goes K-smash,

or is saved—depends on how you look at it.

Then close on the heels of the "Ides of November" is Thanksgiving Day with its savory suggestion of roast turkey, oyster dressing and cranberry sauce.

The entire wage of one full round trip may be required to purchase the turkey hen, and the frugal wife at the last hour may substitute "hamburg," but that need not prevent us in the conversational fulness of the day from telling how ten or twenty years ago a big, bronze, full-chested turkey was worth only one dollar.

But the round trip brings five dollars now, and years ago it only brought half as much. Eggs were ten cents a dozer, but the ten-cent crop wasn't good.

What's the cause of all of it?

Why, of course, it is the Dingbat Bill, or the Allrich-pain bill, or Ballinger, or High-Jinks, or Doc Cook, and if you don't know you deserve to be in ignorance. If you had lent a dutiful ear to the campaign eloquence of the past two months, you would have learned all about it; just how it happened, and the rest that is coming to us. If you failed to vote for Jacob Furgeson for that seven-thousand-dollar job at Washington, where as "champeen of the peepul," he could throttle the octopod—you deserve to pay a dollar a dozen for eggs.

We had a chance to vote for Jake.

Jake called at our office and was introduced to all the boys.

It did his soul good to meet railroad men: At one time he thought he would become a railroader. He thought of taking a job firing, but some trivial incident—couldn't just remember what—came up and he did not get on. But his brother's wife has a cousin in Iowa running an engine, and that makes him feel related to railroaders.

It does not take much of a thread for a politician to find a sympathetic tie.

Jacob was introduced all around—to Mr. Cash, Mr. Rate, Mr. Check, and the rest of the office force.

He clasped every man by the hand with a hate-to-let-go touch. He needed votes.

"I always think," said Jacob, in soft, purring tones that felt their way, "that office work is nice, clean, healthy work, when there are not too many hours, mind you. On that point I have decided views. I don't believe any man should be compelled to bend over a desk more than eight hours a day.

"Eight hours is enough. Eight hours for work, eight hours for play, and eight hours for sleep. That's my religion. When I get to Congress, I expect to advocate any measure that will make eight hours a legal work-day. I have great respect for the office men of a railroad. It's like a bank—everything's got to be to the very cent. It takes ability to run these places.

"I have a cousin, gentlemen, whose husband is cashier for the Upland Road at Crisscross. Maybe you have met him. Haven't? He don't get away very much—he's kept very close. His work worries him a good deal. He often has to go back after night and make his books balance. He complains the road don't furnish help enough. That's another point. I don't believe in railroads overworking their men. This isn't Russia!

"If I get to Congress, I want to call attention to these things. Unless there is some one to stand up and bawl them out, the big corporations will go to any length to make dividends. I'm mighty glad to meet you, Mr. Cash, and Mr. Rate, and Mr. Check. Here's one of my cards. If there's anything special I can do for you boys when I get to Washington, I want you to let me know. I will see you again before the election. Don't forget me. I am mighty glad to meet all of you. Good-by."

Jacob cast his eyes over the office and backed out with a few lingering nods and ingratiating chuckles.

"He's a mighty nice man, ain't he?" said Rate.

"Is he?" asked Check doubtfully.

"Nothing to it," said Cash. "He's got his little speil, but you can send him to Congress a thousand years, Rate, and he won't get you out of bondage. You'll still have to work for a living. You, too, Check. You fellows are not so down-trodden either, so don't listen to all you hear. Neither of you put in over six hours a day real work as it is. Don't depend too much on Furgeson."

"Well, Bill Bryan—"

"Cut it out, Check! Don't you see that drayman waiting for you to list them household goods?"

"Theodore Russevelt and John Mitchell are—"

"Got all them shipping orders ready for the bill clerk, Rate? Better get to it; you'll hold him over eight hours."

"You heard about Jumbo the Miner

over at Fungus, didn't you? Why, he's going to stand up three rounds before Johnson, next Friday night, at the rink."

"Where did you see that?"

"It's in the paper this morning."

"Tell us about it."

And the drayman waited a little longer.

Furgeson, the politician and candidate, suave and sympathetic, started down the track with his railroad cicerone.

the sixteen-hour law, and the patent-coupler law, and the extra-brakeman law. Our party passed all of 'em."

"How about the employer's liability law? You fellows turned that one down," put in one of the crew.

"Only temporary, I assure you. We had powerful opposition on that. Special interests were arrayed with all their cunning and resources—"



THE CANDIDATE PLIED
AN INDUSTRIOUS
PENCIL.

J. NORMAN LIND.

They ran across the switch-crew doing the yard work. Furgeson was introduced all around, and hung on to the coal-be-smearred hands with a clinging fellow feeling.

"I'm mighty glad to meet you, boys," he said. "I have the greatest regard and admiration for railroad trainmen. I had it in mind to go firing myself when I was a young fellow. I suppose I would be running an engine now instead of being in politics if I hadn't got into a law office instead. My folks kicked on me going onto the railroad. My wife has a cousin in Iowa running an engine, so I feel at home with railroad men. If I get to Congress, I expect to keep the railroad men in mind. If there's anything I can do for them, I am at their service. The brave men who sacrifice their lives in the transportation service of the country need every consideration. Here's

"But they tell me you voted against it," interposed the troublesome member.

"Me! Why, yes, in the form in which they brought it up, I did. But you should read my speech delivered on the floors of Congress. Let me have your name. Write it down. I'll mail you my speech. Read it through. I exposed the corporations. What did they do? They emasculated the bill until it was meaningless."

"But our officers were satisfied—"

"They didn't know they were gold-bricked! Read my speech! I voted to put it away temporarily until railroad men had a chance to learn the truth, and until the measure could be brought in again with its objectionable features eliminated. I am for the man who works, but I would not stand by and see him duped by a counterfeited measure. Read my speech! It tells why I voted against it!"

"Say," said Conductor Reyburn, "I don't care how you vote. What this country needs is better agricultural results. You needn't bother about mailing me any speeches, but if you will send me a package of Spark's Earlian Tomato seed, I'd be much obliged to you. I've got a three-acre truck patch, and scientific farming's the question of the day anyhow."

"You are right," eagerly assented the candidate, anxious to get away from the talk on the liability law, where his record needed explaining. "All our glory and greatness is from the soil. Is there anything else beside the tomatoes?"

"Put in a package of Warted Hubbard Squash."

"Warted Hubbard Squash," repeated the candidate, writing it down on one of his cards.

"Add a package of Krewson's Oblong Black Spanish Radish," continued Reyburn.

It was noted.

"And a package of Yorkshire Hero Garden Peas, and add a package of Black-eyed Marrowfats."

A pause.

"And a package of Ruby Giant Peppers. Got that down?"

"Put in a package of Rhode Island Yel-

low Cracker Onion seed, and a package of Monte Cristo Watermelon seed—don't forget that."

The candidate plied an industrious pencil.

"Add one package of Hoodoo and one package of Norfolk Button Muskmelons."

The candidate fished up another card.

"Put down one package of Black-seeded Tennis Ball Lettuce, and one package of Early Cyclone Cucumbers—you got them?"

"A package of Golden Bantam Sugar Corn—"

"All right, Mr. Reyburn, I'll do what I can to have you supplied."

He made an adroit movement to put the cards in his pocket and close the requisition.

"Add a package of Early Scarlet Horn Carrot seed," persisted Reyburn. — "And while you are at it, put down a package of Lenormand's Short-Stem Cauliflower, and Late Drumhead Cabbage and Crimson Globe Beets, and White Creaseback Pole Beans, and Piledriver's Stringless Pods, and White Marrowfats. Then there's Jerusalem Artichoke. I've been wanting a start of Jerusalem Artichoke for three years. You can help me out on that. Wonder I didn't think of you before. When you get that down put in a package of Extra Early Purple-Top Milan Turnips, and I want to get a start of Budlong's Improved Rutabaga. And do you know anything about Champion Moss Curled Parsley? Maybe I had better take the Fern-Leaved—or the Half Curled—that's it, make it the Half Curled! And Perkins's Long-Pod Gumbo, and a start of Chinese

Mustard and Black Pekin Egg-Plant, and French Spawm Mushroom—"

The candidate gave a sudden start.

"By George!" he exclaimed, "I'm late! I've got to meet the committeeman at two—"

Reyburn held on.

"There's field, forage, and silo weed—"



HE GOT THE WATER, TWO GALLONS OF IT.

"Can't you write 'em out and mail 'em to me! I've got to meet the committee-man. Good-by, boys! It does me good to meet railroaders—the men that actually—"

"And Soy Beans, and Dwarf Essex Rape, and Cow Peas—"

"I'll remember you, and we'll see what can be done. If you can pass along a good word for me, boys, it will be appreciated. It does me good to meet the boys—the heroes of the rail—and to shake their honest hands and—"

"There's Japanese Buckwheat, Hungarian Millet and Sugar-cane—"

"I'll do what I can. Good-by, boys—"

"And grass seeds—Kentucky Blue and Turkestan Alfalfa and Bokhara Clover!"

"I don't know just how much I can secure for you, but you may depend on me! Good-by, boys!"

"And look into the ornamental vines and shrubs for me," continued Reyburn, holding on and following the candidate away. "My wife's interested in flowers. What's the government doing in foliage and bloom? Do you know? You don't—that's strange."

"Good-by, boys!" A parting wave of the hand, and he escaped.

"Say, Reyburn," said the engineer, "you don't think a statesman cares anything for carrots and Johnny-jumps-ups, do you?"

"I don't know what you mean by statesman," replied Reyburn, "but that fellow can't do me any good unless he helps along the truck-patch. Some railroaders like to hear the brave-men-of-the-rail spiel them fellows give. Nothing to it. Soil and seed is the only question before the American people to-day—"

"By George! Reyburn," exclaimed the engineer with a sudden start, "you forgot something! Do you know you didn't order any pepper-pod seed?"

"I'll write him. Get a hold of them three gondolas and the two cars of billets in the team track—"

And Candidate Furgeson passed out of mind.

Candidate Furgeson was next presented to crossing-watchman Lightfoot, at Main Street.

"Mighty glad to meet you," he exclaimed breezily, pumping the white-flag hand of the watchman vigorously. "I am always delighted to meet railroad men, no matter where they are located or what they do. I have a cousin in Iowa who is an engineer. I came pretty near being a railroader myself.

I feel very close to railroad men. There is something fascinating about railroad work that holds men. Don't matter what kind of a job they have, men don't often get away from it. Been here long, Mr. Lightfoot?"

"About twenty years watchin' this crossin'. Bill Bryan's special has passed over this crossin' thirteen times. Russefelt's been through here three times. He smashed his hat over the railing and spilt a lot of words right where you're standing now. Bill Taft went over here two years ago, and lit up these surroundin's with one of them smiles of his. This is your first trip on the crossing! I can't recollect that I ever heard of you before."

"I represent this district in Congress, and I want to go again. I want your help—"

"Don't make a durned bit of difference to me who's there. I got to put in them twelve hours just the same, but whenever them politic fellers comes on this crossin' I write it down on the wall of my shanty. What did you say your name was? Furgeson? Never heard of you before, but I'll put it on the wall, anyway. I'll risk it—"

This was all the candidate got out of the crossing watchman, but he had the satisfaction of knowing that he stood on an historic spot, and that his cognomen was inscribed under the names of the most illustrious of our land on the wall of the crossing-watchman's shanty.

They next took Furgeson down the track a mile or such a matter, to visit Jim O'Brien and his section gang of six men, all voters.

"I am glad to meet you, Mr. O'Brien," said Furgeson, "and I am glad to shake the hands of these men. I am always glad to meet railroad men. My wife's cousin is a railroader in Iowa. I came near being one when I was a young man, so I have a friendly feeling for them. I feel that I am one of them. And whenever I can do anything for them I am glad to do it."

Jim O'Brien traces his ancestry back to the fighting stock of Connaught. So he stood up before candidate Furgeson unafraid and unawed.

"Fellow-citizens," called out Jim to the gang, with oratorical effect, "this here's Furgeson. He's running for President—"

"For Congress," corrected Furgeson.

"Furgeson's an Irishman," continued O'Brien undaunted.

"Scotch-Irish," interposed Furgeson.

"Hang the difference in this country—we're all wan anyhow!" O'Brien continued. "Has Furgeson iver done anything for me? No! Has Furgeson iver done anything for you, Tim Hogan? Speak it out! Don't be afraid! He has not, you say! Has Furgeson iver helped any of the rest of you?"

Jim raised an inquiring hand and paused, while from behind the barricade of picks, shovels, crowbars and tampers there came an unanimous negative.

"We don't care who's elected," persisted Jim. "What we want to know, Furgeson, is bacon and spuds coming down or be they goin' up higher?"

"That's the issue, Furgeson. Can a man on wan-sixty a day and six children, and not a cent more in sight—but more little wans maybe—can he live? Furgeson, I put it to you. And will you jump on to the bacon trust, and the spud trust, if we elect you to the council? Will you give 'em belix, Furgeson? Can we depend on you?"

Now Furgeson returned some soothing and propitiating words touching the gold output, the tariff, the trust and the pauper labor of Europe.

O'Brien remained belligerent and unconvinced, but he took a new turn.

"Will you do us a little favor, Furgeson," he asked, "to show us you mean well? Will you take that watercan and go over to that farmhouse beyant the hill and bring us a can of water. This is a hot day, and these men be sufferin' from thirst, you can see that yourself. Wouldn't a kind act like that to these hard-workin' men put you in well with them? Wouldn't it now, Furgeson?"

Furgeson, without a word, picked up the empty can and marched off as if the order had come direct from Uncle Joseph Cannon himself.

He found the farmhouse "beyant" the hill—quite a way "beyant" in fact—but he got the water, two gallons of it, and he lugged it back.

They drank a hilarious but non-committal toast to "Prisident Furgeson."

Then they moved a pile of ties.

O'Brien and Hogan put a stick under the end of a heavy tie and they called to Furgeson for the other end.

Furgeson's eyes bulged, the veins of his neck stood out, and the sweat poured down his face—but he made the trip five times.

"We'll take you to town, Furgeson," said O'Brien, cheerfully. "We'll take you in on

the hand-cyar. Put on the cyar men! Stand right there, Furgeson, git a tight hold on the handle-bar—and pump, Furgeson."

O'Brien may have pumped and the gang may have lent aid—there are doubts—but Furgeson went down with all his weight and up with all his might, laboring like a galley slave on a rolling sea, and the "cyar" merely crawled along.

O'Brien gave vent to the surging political emotions that were within him in a loud and challenging voice, but Furgeson could only answer in guttural monosyllables. He hadn't the wind.

He dropped off at the station in a state of limp. He was panting like a one-cylinder motor.

"Good-by, Furgeson," called out O'Brien. "If you had to keep that up tin hours a day and every day of your life for wan dollar and sixty-two cents a day, you'd know what it is bein' a laborin' man on a railroad. Come, Hogan. Heave to and bear down—"

"How much do that job of Congress pay?" asked Hogan.

"Seven thousand a year," answered O'Brien.

"How much does Roadmaster Sullivan git?"

"A little over a thousand."

"A little over a thousand, and Furgeson siven thousand. Sullivan can pump a cyar tin miles and niver pant. Did you hear Furgeson? Only one mile, too! He's a weaklin', Jimmie. What are we votin' for the likes of him? There's Tid Russ O'Felt. D'you think he'd be out of breath from luggin' a can of water, and a few ties, and pumpin' the cyar wan mile? D'you think that little mild exercise would interfere with his line of talk? Tiddy's a *great* statesman!"

Furgeson having run hot it is the duty of this narrative to "set him out," until he can be repacked and perhaps a new brass put in.

This gives us the opportunity to inject a few words respecting politics and the railroad man.

There are more than one and a half millions of us scattered throughout the fair domain and no Congressman or constable can run without giving a goodly number of us an opportunity to lend support or land on him, as the case may require.

Swelling a little with pride, I want to put it down that we are a potent force—only we don't "pote."

A great railroad president of a Western line, alarmed at the growing hostility against railroads on every hand, was interviewed recently and his observations were widely copied.

a great political army of more than a million and a half railroad men massed in one unit and for the single purpose of self-preservation, is not reckoning with that elemental quality of human nature which



BUT HE MADE THE TRIP FIVE TIMES

He appealed to railroad workers everywhere to go into politics, to ascertain the attitude toward railroads of every man who runs for office, and to "half-nelson" wherever there was a hostile hint regardless of party attachments.

We would become a force to be feared and favored by the politicians, and the scourge of prosecution now directed against the railroads would come to an end.

But railroad men divide. They always have and they always will. In every man there is a certain hereditary taint of party loyalty. It outlasts his religion. It directs his ballot with a certain automatic blindness, and a "get-together" appeal is futile against it.

There isn't much of the oriental suberviency in the free-born American. He is here to complain, criticize, and object. He can't be gotten together on any proposition, even if it is for his own material gain.

The railroad president who dreams of

would overturn the pillars even if the house tumbled down upon his head.

If he must moralize it should be in this way: If every tree that grows were a hard maple, there would be maple molasses enough for every man, woman and child for pancakes three times a day the year round.

There is a certain saccharine pleasantness to that sort of philosophy. It is within the same plane of probability as if one would say, "If all railroad men would get together politically," etc., etc.

Here and there at terminals, or wherever railroad men are stationed in large numbers, we find some trainman, foreman, boss, or office man who carries the railroad vote around in his pocket.

He is to the front in every campaign. He attends the caucuses and the secret meetings and he speaks for the railroad men.

He tells what they want and what they must have, and just what they will do if they don't get it.

Nobody appoints him a bell-wether. He kindly takes on that function of his own accord, and in this little play of his own prejudices, likes and dislikes, he fools and flatters himself that he has a following.

I knew a conductor at one time named Benson. Benson's Koran was the party platform. The book of rules was only an

to drink their fill at the party trough by Benson.

Benson was patted on the back and told that by and by his time would come when his party would reward his vigilance and activity in keeping the railroad men in line.

At length Benson ran for sheriff of the county. He announced himself as the rail-



annoying incident of his daily life. But what his party said about the tariff, conserving the resources, or foreign relations was vital to Benson.

Benson attended all the conventions he could. He had the politicians and the candidates coming to him for the inside information of how the railroad men would vote and how they felt toward the party.

Benson always pictured them muttering mutiny, to be seen and reasoned with only by Benson, and led back to the straight and narrow way only by Benson, and to be made

road man's candidate. He let it be known that if he was defeated in the convention, not one of the thousand railroad votes would be cast for the party. They demanded this timely recognition of one of their number, and if denied, he could not prevent the party from the catastrophe of overwhelming defeat at the hands of the offended rail-
roaders.

After lining and delivering the railroad vote for years, Benson thought there would not be a dissenting voice. On the count, there were six candidates and the conven-

tion deliberately chose a tassel-whiskered hog-raiser from way back in Mudrun township. Benson stood number six on the list. He swallowed his disappointment and stood up and moved that the nomination of the hog-farmer of Mudrun be made unanimous and that there need be no fear of the railroad vote. He—Benson—would attend to that.

Benson's railroad work was faulty, and after a series of blunders the superintendent let him out. Benson laid his discharge to far-reaching and powerful political forces bent upon destroying his influence.

From that day Benson had all his time for his country. The bosses used him for all the little jobs around headquarters where a handy man is needed. He hung around the court-house for odd jobs as a bailiff or as a convenient juror. He grew seedy and subservient, but with all this he never relinquished his hold on the railroad vote, finally getting to the place where he would sell it in a lump lot to anyone needing it, for anything from one dollar up.

I saw Benson last week at his voting place. He looked flayed and fallen. He held a poll-book in a rather shaky hand. The sunset tip was on his nose and there was corn and malt on his breath. He was working for the party.

He plucked me aside, put his mouth close to my ear and shielded his voice with

his hand so the weight of his words would not carry to hostile ears.

"Furgeson's goin' to be elected in a canter. I've got the railroad men lined up for him solid. Furgeson's our next Congressman."

There was triumph in his watery eyes. He held me a minute longer, and his voice went to a whisper.

"Say, have you a dollar you can let me have? I'll give it back to you next week."

I gave him a verbal order on Furgeson. But it was never cashed, for Furgeson "got his" on that eventful day.

Furgeson—the man whose wife had a cousin railroading in Iowa, who exuded sympathy and fellow-feeling for railroaders at every pore, who leaned on Benson for the railroad vote—was numbered among the "also ran."

So you, Mr. Railroad President, and you, Mr. Candidate, and you, Mr. Politician—the railroad vote cannot be controlled and cannot be delivered. No matter how imminent the danger or how worthy the cause, it is the law of human nature to question and dissent, and railroaders are largely human.

There is one thing we have to be thankful for as we carve the turkey, the pot-roast, or the liver: If we were not unyielding, self-sufficient, even pig-headed, we would not be where we are to-day.

KILLED TRAIN ROBBER WITH A STONE.

Engineer Foiled Hold-Up on Colorado Midland by Braining Outlaw Armed with a Rifle.

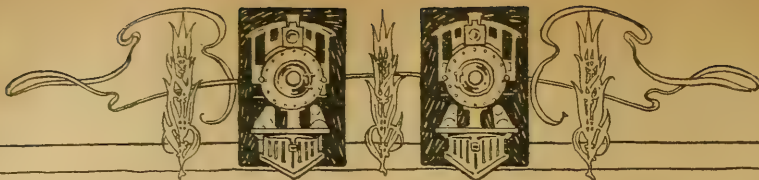
ENGINEER FRANK STEWART, of the Colorado Midland Railroad, has proved himself the sort of man that train-robbers will do well to let alone in the future. Armed only with a rock, which he had picked up from the road-bed, this plucky hogger gave battle to a bandit carrying two .44 Colts, who, with several companions, was attempting to hold up his train at a siding near Colorado Springs recently, and felled the outlaw with a blow on the head that almost instantly brought about his death. Frightened by the fate of their pal, the other robbers fled, escaping into the hills, where they were sought for days by a sheriff's posse.

The hold-up occurred as the train was making a siding to allow the passage of a train from the west.

The first intimation of the attempted robbery came when Engineer Stewart and Fireman Paul Bochman were ordered to stop the train and alight from the cab of the engine. Both men did as ordered, but Bochman attempted to escape by dodging under the baggage-car. As he did so the bandit stooped to shoot him, when Stewart picked up a rock and hit the man a death-dealing blow on the head.

As the bandit fell forward, he fired at Stewart. The bullet hit the engineer in the left thigh, inflicting a painful wound, but that ended the fight, for the desperado died a moment later.

The scene of the hold-up is one of the wildest in the Rocky Mountains. The country is sparsely settled and it offers an ideal opportunity for escape into the hills.—*San Francisco Chronicle*.



THE PRESIDENT.

BY J. EDWARD HUNGERFORD.

Written for "The Railroad Man's Magazine."



We have sung in ardent phrases of the gallant engine-crew,

And we've hymned the brave conductor from most every point of view;

We have praised the superintendent and the man who lays the track,
And we've hung the laurels thickly on our worthy friend the "shack."
We have lauded up the ticket-man, the man behind the claim—
We have bragged about the section-man, and others I might name;
But there's one deserving fellow that we've skipped without intent—
He's the man who runs the railroad, boys; our friend, the President!

We've had visions of him lolling in his private palace-car,
And we've viewed him through the smoke-wreaths of his fifty-cent cigar;
Oh, his job looks soft and easy from a certain point of view,
But he's got his troubles, pardner, just the same as me and you.
For he has to boss the railroad and he has to make it grow,
And his brain is always workin' like a whizzin' dynamo;
And his path is often rocky and a mighty steep ascent,
But he packs his burden gladly, does our friend, the President!

There's a hundred pressing matters up before him every day,
And he's got to solve 'em quickly in a diplomatic way;
He's a thousand things to think of and a thousand things to do,
And he's always on the fightin' line—his cry is "Put it through!"
Oh, he's sure a workin' wonder with a genius for his job,
And he's felt the pulse of traffic till he knows its every throb;
So when worthy men are mentioned let us pay acknowledgment,
To our cool, unswerving, praise-deserving friend, the President!



MASON, THE GRIZZLY.

BY CHAUNCEY THOMAS.

The Thrilling Adventures of a Brave Man in the Rocky Mountain Country.

CHAPTER I.

For the Mines of Montezuma.



HOT SULPHUR SPRINGS bubble, steam, and fume at the foot of Mount Bross, in Middle Park, Colorado. By these boiling springs two men were encamped. One was a massive lump of a man, a moving mountain of brute strength—"Hungry Joe," fair of heart, great of arm, young, lazy, and ferocious.

The other was of another breed. He could look over a six-foot rock with ease, and was as slender and straight and supple as an Indian. Although a black eye was never seen in a human head, the eyes of this man, which seemed to be of black-and-white agate, polished till they glittered. To look into them made one think of gazing, fascinated, into the black caverns of a pair of Colt's forty-fives; yet, on longer look, these eyes were not jet, but a deep steel-blue gray. The second look strengthened the impression of blued steel. Though keen and imperial, those eyes were not unkind; but nothing ever escaped them.

Fine, silky, black hair, penciled with silver white over the temples, curling crisply at the back, fell in heavy waves down the muscular neck to the square shoulders. The jaws were wide and firm, even hard, as was the mouth. The nose was large and straight, with thin but wide-open nostrils that sometimes quivered.

The impression that the man gave can be summed up in four words—quickness, strength, honesty, and intelligence.

Two thousand miles to the east—along the old Delaware—as a boy they had called him "The Grizzly." At twenty years of

age, when he suddenly came to know that the advice of Horace Greeley was good, this name was all that he brought with him across the Big Muddy and the Great Plains of the Rockies. His name in the States had been—well, let it pass.

It is neither healthy, profitable, nor polite to ask such questions in certain parts of the Rockies. Honest men sometimes changed their names on the frontier as often as they did their shirts, for no other reason than caprice. This man was Mason.

The two men did not know each other's names nor history. They had met by accident three months before, while crossing Berthand Pass, yet they had slept, eaten, and worked side by side like all but silent brothers. Such was the custom. Need it be said they were hunting—hunting for gold? Prospectors, those forerunners of civilization, are strange men.

A mountain evening was falling; the smoke from the tiny log-hidden camp-fire sulked away through the grass and gathered in the willows; supper was over. The few tin dishes were as yet unwashed. Mason was smoking; Hungry Joe, his tanned forehead wrinkled like an old boot, was poring over a faro-deck, spread out on his blanket, and laboring to demonstrate an invincible "system" that always haunted him. Over all hung the breathless beauty of the kindling stars. Rapid, almost silent, human footsteps came patting down the game-trail.

A man, easy-going, shiftless in a way, walked up to the fire.

Hospitality blooms at its best within the light and warmth of a frontier camp-fire. Are you hungry? Eat. Are you tired? Rest. Who are you? What are you? Why are you as you are? These questions are never asked. It might be unkind; perhaps dangerous.

On the other hand, it is not good form for a guest to attempt to examine his host's rifle or revolver. Ignorance or violation of this rule was why some men died. There are various reasons for all of this. The wilderness has laws unto itself, distilled from experience and necessity. These to the untaught sons of civilization are a mystery, yet are simplicity itself and the essence of common sense to those who understand.

"Evening, pardner," was Mason's cordial greeting. He had risen only onto one elbow, that he might have a better look at the stranger. To have risen to his feet would have meant open suspicion toward his guest.

"Howdy?"

Hungry Joe said nothing, but nodded. Social forms and language are relaxed when policemen, street-cars, and such things are hundreds of miles away.

"Any objections if I camp with you people? My outfit is over the ridge yonder. Followed a trail over into this country, and the fallen timber up the mountain there tangled me all up. So I'll feed and snooze with you if you're willing."

"Welcome you are, pardner. You'll find the grub-box under that bed-sheet. Help yourself. Dishes ain't very clean. Haven't washed them for a day or two, but there's the hot spring there if you're dainty. There's a hank of elk on the tree, and you'll find a swig of forty-rod in that jug in the cold spring over there, if you're inclined that way. I don't use it myself; it's Joe's, but you're welcome."

The Samson grunted a morose consent. The newcomer took the jug from the cold spring, pointed its bottom to the stars, poured distilled hell down his throat, and then wiped the tears from his eyes.

"Ah-h-h!" he gasped. "If this spring ran such stuff, I'd let the new diggin's go to perdition."

"New diggin's?" echoed Mason, while Hungry Joe raised his head. "Where?"

"No savey 'em, eh? Just across the range from here, over the hay back from St. Charles. Must have been long in the hills not to hear 'bout 'em. I was on my way out to 'em, but learned that the reds are up between here and there—so I don't know. Ain't you two on your way out, also?"

"No," answered Mason. "I haven't heard a word nor seen a white face but

yours for several moons, except Hungry Joe's, here, and it only used to be white. Bah with the Injuns! How 'bout the discoveries?"

"All trails end there now'days, pardner. Biggest thing ever known. Gold layin' round like sand in this spring. Some say they're the 'Lost Mines of Montezuma.' If it wasn't for those Utes— What day is to-day?"

Not one in the three could tell. Time is lost track of in the wilderness. Tom had not wound his watch for a month.

"'Lost Mines of Montezuma,'" breathed Mason. Then he rose. "Pardon me, stranger. I leave you. That affair concerns me. Injuns! Ugh! I'm going through 'em or around 'em. Goin' with me, Joe? Stranger?"

"Injuns too bad," answered the stranger as his lips kissed the jug neck once more. Joe eyed the vanished liquor with thickening sullenness, and shook his head.

"Hang the Injuns! I'm off. Joe, pack up for me—light, mind you—while I saddle Rattler. I'll trade you that pack-jack of mine and all the grub for all your extra cartridges and that big six-shooter of yours. Is it a go?"

"Sure," growled his massive partner as he rescued the jug from the stranger, rolled it in his blanket, and returned to his cards, altogether ignoring Mason's request toward packing.

But this the active Mason did alone in three minutes. Then he saddled a split-ear Indian pony, and prepared to start. The stranger spoke.

"Say! Hold on!" said he. If I were you I would not be so quick to attempt to ride to the east of here alone. The Utes have been having ghost-dances and are out for scalps. Have cleaned out two outfits along the Grande already. Besides, there has been a coach robbery on the Smoky Hill route, and something between twenty-five and a hundred thousand dollars, besides a big gold bar, is gone. Three men. Five thousand reward. Thought at first that your outfit might be them. They're said to be head this way. Things are all stirred up between here and the Big Muddy. It is risky business to make that ride alone, pardner. Better wait till daylight."

"Daylight nothing. If anything, I'll hit the road in the high places at night and lay over in the timber during the day. I won't do that 'less I have to. I'm not looking for

safety. The red coyote that tries to head me off had better be doing that."

Meanwhile the saddle had been flopped on Rattler and the cinches gently tightened. Mason buckled on both his own and Joe's revolver. They were just alike, forty-fours. His long, twelve-pound rifle was slipped into its saddle-sheath on the left side, so that it rested easily beneath the knee on the left side of Rattler. Mason could never get used to carrying it on the right.

"Good luck to you, pardner. Hope you make it," said the stranger as they shook hands.

Hungry Joe wasted no ceremony on a good-by, but he demonstrated the warmth of three months' outdoor friendship by rubbing the cartridges in Mason's belt with his all-powerful talisman, his invaluable rabbit-foot. Then he gripped Mason's hand with a parting, "Stay with your hair, pardner."

Mason did not speak, but looked all around into the now clear starlight; then, seeing nothing hostile, he grabbed Rattler by the cheek-piece of the bridle, pulled his head sharply around, and slowly but warily swung into the saddle.

Rattler gave a few wicked pitches, then started for the new diggings, fifty miles away, with Mason on his back.

Back through the pines on the night wind came Mason's farewell:

"Adios. For the Mines of Montezuma."

"Look out for the dancers and the V. C's!" answered the stranger cheerily.

"Good luck to you, pardner!" bellowed Hungry Joe.

That roar started to their feet a herd of elk bedded down a mile away on Ute Bill Creek.

Mason was gone. Hungry Joe and the stranger silently listened to the hoof-thuds growing fainter and fainter, and when silence closed round the camp once more, Hungry Joe handed the uncorked jug to the stranger.

Then they both went to sleep. Earth was their couch; heaven their canopy.

CHAPTER II.

A Night Ride.

THROUGH the night Mason rode. Over his right shoulder careened the silver crescent of the new moon. He smiled, and patted the bounding Rattler also on the right shoulder. He felt the hard muscles writhe,

knot, and relax beneath his palm with the steady rhythm of machinery. The first dash over, Mason pulled Rattler down to that mile-killer between a trot and a walk.

Mason knew how to ride a horse.

Across the Four-Mile Divide he went; ten miles away he struck the Frasier. Later in the night the horse and rider, both still fresh, splashed through First Creek twenty miles on the way, then waded Crooked Creek, and mounted the bluff on which are the five miles of Sage Brush Flats. No Indians yet. Hiding the match-flame in his hat, Mason lit his pipe, and let Rattler loaf a quarter of a mile.

"The Lost Mines of Montezuma," he kept repeating over and over, as in a dream. Just what he was going to the new gold-diggings for Mason did not know. He would decide when he got there.

Gold, gold, gold was the lure!

But though he dreamed yellow in his subconsciousness, his whole active attention was keenly given to the work in hand—the ever-changing direction and condition of the game-trails, Rattler's breathing, the set of the saddle, and all the little things that would help eat into the miles ahead.

Now they were turning up the South Fork that comes down from Berthand Pass. The trail dipped down into a dark box-cañon. Rattler trotted around a sharp point of rock, his pointed, sensitive ears thrown forward. He snorted and stopped. Half a mile ahead was a huge camp-fire. Around it, appearing and disappearing in the light of the flames, jumped, limped, bounded, hopped, and shuffled a number of fantastic figures.

Mason swore. He knew what it meant. He would have joked with the Angel of Death.

"Rattler, old boy, there are your Utes enjoying a german. Or, perhaps, it is only a dutchman. What are we going to do? Go back? No, sir? Go through? It don't look like it. We'll ride around. But how about any trails? Going through mountain timber after dark with a horse can't be did. The moon will soon set. It's clouding up, too. Rain, I guess. Looks like it. Feels like it, too. Rattler, we must get out of here and hide out till daylight. Git!"

An arrow—a purring, searching arrow—whirled over Mason's shoulder. Back up the cañon tore Rattler. Mason bent low over the horse's neck. Two miles in five minutes is not bad running for a tired cow-pony up-grade in the dark.

Fearing pursuit by fresh ponies, and afraid of ambush ahead by lurking sentinels who had purposely allowed him to pass unmolested so as to trap him, Mason suddenly turned Rattler into the black mouth of a side cañon, dismounted, and, feeling for the game-trail with his feet, led the panting horse into this temporary haven.

Daybreak found the man and horse far up this branch near the top of the ridge through which cut the main cañon. Here fallen timber blocked their way. In a small, secluded park Mason camped.

Rattler, bridled and saddled, was allowed to feed on the tall grass. His picket-rope was fastened to the belt around Mason's waist.

Mason made a cold, scant breakfast on beans, boiled elk, and ice-water. Then he smoked and planned. Clearly it would be madness to attempt to cross the bare crest of the ridge above him in daylight. The Indians on the other side, now aware of his presence, would calmly lie in wait for him to ride into them.

He must wait where he was until near evening, then make his way up the slope through the fallen timber, and remain hidden in the upper edge until after darkness had fallen.

What was on the other side of that ridge Mason did not know. At one place a small water course, headed by a clump of scrub pine, ran to the very crest of the ridge. Tying Rattler in the thick timber out of sight, Mason wormed his way, part of the time flat on the ground like a snake, up the shallow water course to the scrub pines. The other side of the ridge was open in places from the crest all the way down; in others it was impassable because of burned and fallen wood.

Not an Indian was in sight; but from a dozen points the signal smokes were slowly rising.

Below and five miles away three wagons were burning. Mason carefully studied the country ahead and picked out his route. Seeing a rain-storm coming down the pass, Mason wiggled back to Rattler, tied the lariat once more around his waist, found a scant shelter under a clump of willows, and, with his rifle for a bedfellow, lay down to sleep.

It began to rain—drop, drop, splash, splash, then a down-pour. Mason was sleepily thankful, for this would wash out his back trail. But a Ute Indian can, with

painful care, follow a rain-washed trail—and the Utes were on the trail.

Mason slept.

CHAPTER III.

Rousing the Game.

THE shadows were beginning to stretch away to the east. Mason was asleep. Twice during the day he had risen, looked carefully around, and laid down again in a new spot so that Rattler might have fresh grass.

Rattler snorted. Mason awoke with every sense on the alert. It is a curious thing, but men long on the frontier are able instantly to awake from a deep, dreamless slumber as intuitively aware of what has recently occurred as if a second nature kept watch while the conscious mind slept.

Mason's thumb slipped to the hammer of his rifle. His left arm instantly straightened, raising his chest and shoulders from the ground. An Indian on horseback was only twenty feet away.

Zip! An arrow cut through that supporting left arm and stuck in the grassy bed where an instant before had rested Mason's back. The left arm was numbed as if suddenly frozen, but did not collapse.

With an action like the jump of a steel spring, Mason's right hand let loose the rifle, whipped his six-shooter from its holster, and two shots answered the arrow. The Indian's pony, shot squarely in the chest, reared and fell backward, crushing its rider to the ground.

Through the shoulder of the rider was a ragged bullet-hole. Mason straightened to his feet, pulled the arrow through his arm, swept his limited horizon with a glance, saw nothing hostile, and warily advanced toward the wounded Indian and his pony, both down and struggling to arise.

Then Rattler bolted. The picket-rope was whipped tight, Mason was jerked from his feet, and dragged half-way, head foremost, across the little park before he could recover himself. With his feet to the front plowing into the sod, he curbed the straining Rattler.

Hastily he tied the trembling, snorting horse to a pine tree. Drawing his remaining six-shooter and cocking it, Mason, keenly watching the straining Indian, ran back and recovered his rifle and other revolver. In the few seconds that had passed, the

wounded Indian's pony had struggled to his feet, where he stood swaying, head drooping, legs braced, and bloody froth oozing from his nostrils.

The Indian was staggering and reeling toward the woods in an effort to run.

When shots ring out in the mountains and the echoes get to playing with them, it is hard to tell at first from where the sounds come. But when once warned, an experienced ear can usually tell in what quarter the following reports originate.

Mason knew this. The three shots already fired were still echoing afar. Many a red ear was keyed to catch any that might follow. Another shot would focus the trails of half a hundred Utes.

Mason lowered his rifle. He drew his knife. It was long and thin and keen; his sticking knife, used to bleed big game.

He darted after the Ute. The Indian turned. He was game to the death. He also drew his weapon; a common butcher-knife. But the Ute was wounded—stunned and almost dead.

Holding his rifle by the stock, in his left hand, Mason swung the heavy weapon and, with the barrel, struck the Indian a terrific blow on the side of the neck. The Ute pitched forward on his face.

Darting behind his fallen foe, the white man dropped with his knees on the other's back. He grabbed the long black hair in his left hand. He jerked back the Ute's head. His knife slashed a long, deep cut across the stretched throat.

Like the spring of the blood-snake, the red knife again cut into the quivering Indian. With a cry, the Indian flung the white man from his back, and made a titanic bound for the woods. In mid-air he collapsed and died. Striking the ground, the body rolled over on its back. To make assurance doubly sure, Mason placed his foot down on the reeking neck, and stuck the knife into the Indian's breast. But the red heart was still.

Not waiting an instant, Mason pulled out the blade and made for the Indian's pony. To let it escape would be fatal. Wandering to the Ute camp, it would leave a plain trail from there to Mason's hiding-place.

The animal had staggered to the stream that roared down the mountain at the edge of the park. Here it was swaying and trying to drink. Running with his knife held at arm's length like a rapier, Mason plunged it into the pony's side just behind the left shoulder.

With a grunt, the horse sank to its knees and rolled once on its side. Then it raised its head in a wild, dumb appeal to the man. It tried to rise. It uttered an almost human cry for mercy. The great, dark eyes looked at Mason with hurt surprise. That look haunts him yet. Blood gushed from the nose and mouth. The head drooped and fell. The horse was dead. Mason dashed the tears from his eyes and choked:

"Your life or mine, my dumb brother, but it has to be."

But there was no time for regret. Mason rolled the carcass into the stream. The water whirled it away. Striding to the dead Indian, Mason dragged the body by the hair to the water's edge, and flung it, too, into the snowy, rushing current.

The water caught the corpse and tore it along among the rocks and logs. Mason stood watching it. It was sucked beneath the green surface. Suddenly the body was shot up by hidden currents half its length up into the sunlight.

It faced Mason. One arm was tossed on high in an attitude of cursing vengeance. The head fell back, and the mouth gaped open in a hideous laugh. As if in defense, Mason threw his arm across his face to shut out the sight. When he looked again, the corpse had disappeared.

All was cool and clear again. Nothing but his wounded arm told that there had been a fight to the death. Such affairs are common on the red and white frontier.

CHAPTER IV.

The Chase.

MASON'S wound pained but little. Hurriedly, in the stream, he washed the blood from his hands, and with the cold water and torn pieces of shirt dressed his hurt. It was not serious in itself; no blood vessels nor sinews had been cut nor bones broken, but yet, to a great extent, it made the man one-armed.

The afternoon shadows had lengthened out a foot. Action had been rapid. Mason ran to Rattler. Go at once, anywhere, at any risk, they must. In an hour forms like huge, red ants would be creeping, crawling, running over the whole mountain-side, and the sound of a shot could not go across the ridge above him.

Up through the fallen timber threaded Mason, leading Rattler. He knew that

somewhere above him on the ridge, either far or near, to right or left, Indians were on the lookout. At the upper edge of the timber, Mason paused, still hidden. He tied Rattler within a dense thicket, then stepped to one side and a little to the front, where the trees were thinner, and scanned the bare ridge.

Along the side of that ridge, an Indian horseman was coming at a fast lope. He was some three hundred yards away, but was riding rapidly yet cautiously, and was keeping a keen watch on the woods below.

Mason rested his cocked rifle in the fork of a dead sapling and waited. The Indian came nearer, and still nearer. Mason's breath came and went, hissing through clenched teeth.

The Indian was only a hundred yards away. Mason looked at him through the sights. Too far. To miss meant Mason's death. If the coming Ute kept to the trail he was following, Mason saw that he would pass within fifty feet of him.

A hundred feet away the trail, to avoid a rock, ran for about thirty feet straight toward the pine behind which stood the statue-like white man. Mason saw that this would give him a straight-away shot. The Indian pony came loping along the trail. Sixty feet more, and either an Indian or a white man must die.

The pony swung round the curve and came leaping along the straight bit of trail only one hundred feet away. The Indian died. The riderless pony snorted, whirled, and bolted back up the trail.

Mason darted to the fallen Indian. He tore from the struggling body the long red head-dress of eagle feathers. Running back, unmindful of his arm, he jerked Rattler loose, vaulted into the saddle, and spurred the cow-horse up the hill, clinging to his trophies.

It was a quarter of a mile from the timber's edge to the crest of the ridge. No sooner did the white man get into the open on the bare mountain-side, than far below him angry shots began to crack and roar.

Mason heard them and distant singing of the lead behind and below him, and the soft spat-spot-spug of the bullets in the timber. He dismounted near the crest of the ridge and, walking, let Rattler gain breath for a quick dash over the top.

When the horse and his rider were so near the top that Mason could see down the other side, he paused a moment to survey

the scene. Nothing hostile was in sight. Behind and below him all was silent and serene, but a murmur was dying among the cliffs, and smoke was floating among the tree-tops.

Hoping to look as much like an Indian as possible, Mason, after first blindfolding Rattler with his handkerchief, donned the trailing Indian head-dress and the red blanket. Mounting, he reached forward, slipped the bandage from Rattler's eyes, and with it waved a derisive farewell to the invisible redskins below. A few satanic yells came faintly up. Then, at an easy gallop, the feathers and blanket flying in the wind, Mason crossed the open ridge.

He stood a fair chance to escape. The slanting side of the ridge had prevented any sound of his recent troubles from getting over the crest. He laughed nervously, but with a thrill he had never known before. Though hard on Rattler's knees and shoulders, Mason urged the horse down the dangerous ridge.

Suddenly, from the bushes fifty feet ahead and slightly to the left, an Indian arose. The mongrel dress Mason wore, half white, half red, together with his tanned face and black hair, deceived the Indian for an instant, for every buck in the red camp was wearing pieces of white man's and white woman's apparel.

The Ute who stood in the bushes wore a battered yet still shiny silk hat, a clean white shirt, worn with the starched bosom behind and with the tails free, while knotted around his vast paunch was a pair of woman's striped stockings.

Over all hung a dirty green blanket. The Indian was drunk. Otherwise his vanity would not thus have overcome his natural caution when on the war-trail. At the sight of this comical yet hideous and dangerous apparition, Rattler snorted, reared, and struck the earth with all four legs stiff and braced. Anyone but a born rider would have pitched headlong over the horse's head and down the hillside.

Whip! The white man's revolver flashed from its holster as the pony snorted.

Bang! The shot went rolling along the mountain-side and down a little, narrow, crooked cañon to the right. The Ute whirled, gave a grunt, clasped both hands over his stomach, doubled up, belched forth a drunken hiccup, plunged forward on his head, flopped a somersault down the slope, shuddered, and died.

Another minute, and Mason was out of sight in the rocky defile.

But over the top of the ridge plunged three Indian horsemen, yelling like mad. Their eyes caught the last flash of that red blanket going down the gulch. With triumphant shrieks, they shot down the ridge and into the cañon in straight pursuit.

The white man was trapped. Behind him tore three of the bravest and most skillful warriors of the Ute nation. Ahead of him was the Indian camp. Escape up the wall-like sides of the cañon was impossible. The smaller cañon entered the larger defile just above the point where clustered the Indian teepees. The chasing horsemen behind were firing rifles as a warning to those in camp ahead.

Quiet reigned among the teepees. Knowing well their position, and that it was guarded by scouts both far and near, those within the skin tents were careless of danger. Suddenly came the alarm. Distant shots and shrieks and the beating of flying hoofs, multiplied by the cañon echoes, turned into a thunderous battle-crash roaring down the pass, and stampeding the lazy camp.

Yelling bucks and squaws, followed by their whimpering young, went bounding, crawling, sneaking up the sides of the main cañon and hid among the rocks. Then silence dropped.

The camp and the cañon seemed deserted, but among the rocks slunk three hundred wild men and women, waiting in an ambush for the expected cavalry charge of the soldiers. Beady, soaky eyes were focused on the trail that disappeared around the bend not far above. Inferno was booming down the cañon.

Around the bend tore a great bay horse, wild-eyed and frantic. His neck, back, and flying tail were in line. His hoofs threw gravel and stones.

Over the "saddle-horn" bent the rider. Around him, the ends flopping in the wind, was a red blanket. Straight out behind him trailed the feather head-dress. In each hand was a cocked six-shooter. Behind him came a similar horseman, and another, and still another.

As the second horseman whirled around the bend, shots rang out, but dust obscured the coming route. The Indians skulking along the cañon-sides thought that the shots were fired to alarm the camp, or else at a pursuing foe.

Click-click-click sounded the cocking

rifles along the cañon-side. An arrow was fitted to every bow-string. Dark, subtle glances shot from the band up the cañon to the race below, then back to the bend above.

Through the camp plunged the horseman. The thunder of the hoofs and the shrill yells mingled into a roar. The second rider had emptied his rifle and was reloading as well as a man might on the back of a running horse. One shot at the scarlet figure ahead of him would be understood by those above, and a volley would end the race. But his guns were empty, his cues were drowned, and he did not carry bow and arrows.

The third and fourth rider dared not shoot, for the trail was straight, and the second rider thus protected the hunted one in the lead. The white man did not fire behind him, for to do so would bring a rain of death from the rocks above. Mason knew safety lay only in the eagle feathers, the red blanket, his black hair, tanned face, and Rattler's hoofs.

It was only fifty feet away around the wall of rock ahead. The camp was passed. The second rider had slipped a cartridge into his pounding rifle. He dropped his reins, jerked his gun to his shoulder, raised his rifle, and fired at the flying rider ahead.

The Indian missed. Mason ducked his head, threw back his right arm, and from inverted revolver answered back. From a plunging horse bullets fly straighter out of a revolver than from a rifle. The Ute and his pony rolled in a kicking heap together. Consternation swept along the cañon-sides—then a blast of fury. The end horseman reined up. With a motion of the sign-language, he signaled to those lurking above. Instantly the cañon became a volcano. Fire and smoke, bullets and arrows, war-clubs and stones, burst from behind every rock.

Down went Rattler. Down went Mason. Both lay still. One was dead—the other stunned. Rattler was riddled, Mason was unhurt.

Like vultures the Indians pounded down upon the senseless white man. An Indian boy bounded down the rocks. He halted. He jerked an arrow to his ear. An older man stretched the bow; the arrow whistled away over the tree-tops. An Indian girl hurled a stone down at the still, upturned face. The jagged piece of granite splintered on the rock beside the white temple.

Colorow, war chief of the Ute nation, leaped astride the captive, flung away the

white man's weapons; dropped his blanket over the outstretched form, stood erect, and raised his rifle threateningly. Frenzied though they were, the Utes knew Colorow, and obeyed.

The senseless Mason was dragged back among the teepees. The fallen Indian limped along with the rest. He was bruised and skinned, but otherwise was unharmed. His pony had a white man's bullet in its chest. Half a dozen powerful Utes seized Mason and flung him into the icy waters of the Frazier.

Strangling and struggling, Mason revived. He was dazed. Standing up, knee-deep in the current, he gazed stupidly at the laughing Indians. Then the situation flashed upon him. Like a corraled buffalo bull, he started here and there, only to realize that escape was impossible.

Reason and coolness came. The superior mind of the white man must save him if he is to be saved at all. Mason, with forced calmness, scooped up a double handful of water and drank. This he did again and again, thinking like lightning. He squeezed the water from his hair and brushed it back out of his eyes; felt to see if his water-tight pouch containing tobacco and matches was safe. Then he waded ashore and held out his hand to Colorow.

"How?"

"Ugh!" and the famous—and infamous—old Ute chief heartily shook Mason's hand.

"Wash heap good after run? Much warm."

Colorow smiled with sardonic sweetness. Mason wanted to strangle the sarcastic brute, but said nothing.

Indians admire all brave men; they worship courage. The Indian is not a coward. Anglo-Saxon standards are foolish and foolhardy to him, but, in his own way, a braver man never trod the earth than the American Indian. Death he does not fear. Fortune he ignores. Thrust and parry is his way of fighting—not hack and hew, as does the Anglo-Saxon. He creeps in, darts away, and lures to ambush; the white man plunges in a bayonet charge. The Indian is the rapier; the white man the battle-ax. Yet, even against tremendous odds, the Indian can close in like a badger and battle in a way that would make the fanatics of Asia and Africa stand aghast; and to a captive, the tearing-rock of the Inquisition would be a bed of roses compared to the

agony of Indian torture. To an Indian prisoner, the fiends of purgatory would seem angels of mercy alongside of his tormentors.

All this Mason knew. He dropped the hand of Colorow, and lit his pipe.

CHAPTER V.

Prisoner of the Utes.

TWILIGHT was thickening into dusk.

Every Ute in the cañon, except the outlying scouts, was seated in many a concentric circle around a glowing bed of coals. Over this fire bubbled a caldron half full of boiling water. The caldron was as large as a barrel. It had been taken from the wagon-train that Mason had seen burning that morning. It had been used by the murdered family of soap-makers.

Eleven wet, red scalps were drying on poles before Colorow's teepee. One was of red, curly hair, four brown, two black. These seven, by their short hair, had evidently come from men's skulls. Another of the gory trophies had a long, splendid mane of wavy brown, another was scant and gray—the scalps of women. Two more scalps, smaller than the others, hung there, that of a golden-haired little girl and the short-cropped one of a boy. These were the evidence of Indian valor.

Near the caldron, apart from the silently eager circles, stood a group of thirty bucks, chiefs, and medicine-men. Some were decked out in full war-gear, with here and there white man's and white woman's garments worn fantastically. All were hideous with paint. The large circles of seated Indians were glumly silent, but this group was having a lively powwow.

In the center of this smaller group, the focus of every eye in the cañon, stood Mason, stripped of his clothing. His hands and elbows were bound behind his bent back. The animated group were hotly debating whether to throw their captive into the scalding kettle, bound as he was, or cut his bands and toss him free into the boiling water so that he could leap out, only to be thrown back again and again.

This would slowly cook him alive. It would prolong his agony as well, and lengthen and intensify the pleasure of the whole camp.

The advocates of the slow torture won their point. Colorow's knife cut the raw-hide thongs. Mason was free, yet face to

face with worse than death. He gave one wild look around, then shot his glances to the distant mountain-tops, still gleaming in the sunlight.

Twenty naked Indians surrounded him. A desperate struggle on his part would have been great fun for them; at the worst, it would be only a life-and-death wrestling match, with the outcome sure. Mason was as helpless as a rabbit amid a pack of wolves, but he had the cold Anglo-Saxon brain; the Utes had only barbaric cunning.

Mason coolly started to walk to the steaming kettle. When within ten feet of it, and just as the Indians, with a chorus of hideous yells, were grasping for him, Mason spat in the face of an Indian stripling.

This young buck, the eldest son of Colorow, was a privileged character in the band. A snarl burst from the lips of Colorow. It was an order. The Indians released Mason and stepped back.

Colorow grunted to his son. The young devil with a sweep of his blanket wiped his face. He reached down and split a long, fine sliver from a piece of fire-wood. Lighting this, and leering at his cool, silent, motionless, though helpless, victim, the Indian boy slowly pressed the burning stick against Mason's chest. For an instant Mason stood like a disdainful marble statue.

Then his right arm shot out like that of a cornered grizzly. His fingers clutched the hair of his tormentor. Whirling and humping his back, Mason hurled the son of Colorow over his shoulder and into the scalding kettle.

It was a wrestling trick he learned on the Delaware. The boy's wild shriek was drowned in the roar of Indian yells. Confusion reigned. Like the penned wild bull he was, Mason crashed against the Indian line surrounding him. Through that red line he went like a snow-plow.

It was all over in an instant. Mason was sprinting down the cañon, for a moment unpursued. The kettle was overturned. The scalding son of Colorow rolled out, dying. Then, like yelping coyotes, the entire camp, save Colorow and a few old men, tore down the cañon after the fleeing white man. It was white-man training against Indian swiftness, and white-man training won. As Mason sprinted round a bend in the cañon, that red hurricane was left behind. The way to freedom and to life was sure. Around the next bend Mason leaped plumb into the middle of a band of Indian horsemen.

The Indian pony in the lead reared, whirled on his hind feet, and bolted with his rider squarely into the horse behind him. Mason was trapped. Behind him were three hundred Utes, before him was Red Shirt's band of four hundred more. To the right and left were perpendicular, merciless walls of granite. Mason stopped.

He knew Red Shirt. In time of peace, he and Red Shirt had been friends, as nearly so as red and intelligent white can be friends, which is saying little. Mason, in defiance of the United States, had once made Red Shirt gloriously drunk simply for a capricious desire to see what the Ute would do when frenzied.

Red Shirt, on his split-eared pinto, overwhelming in feathers, paint, and gaudy blanket, galloped up, his rifle-muzzle covering Mason's breast. Behind Mason, on winged, moccasined feet, came slow but sure death. In Red Shirt was a slender chance.

"How, Red Shirt? Me! Grizzly Mason! Savvy red-eye? Bug juice? Heap-drink? By Iron Rock, Two Moons ago?" gasped Mason, as he shoved his hand up to the chief.

"Ugh! Si. How here?" grunted Red Shirt suspiciously.

Before Mason could answer, a dozen of his pursuers darted around the bend and, without a glance at the mounted band, hurled themselves on their white prisoner.

Mason was buried beneath a hill of scarlet fury. They would have killed him then and there but for Red Shirt. Through no friendship for Mason, but because he wished that he and his followers might help kill the white man in the most delicious fashion, Red Shirt yelled a command at the writhing heap. His words carried little weight, but the muzzles of half a dozen of his men's rifles bore a silent meaning not to be ignored for an instant. Mason was now the prisoner of Red Shirt.

The coming of Red Shirt's band was expected, but his arrival that night was a surprise. Signal-smokes that morning, however, had warned him that blue-coated horsemen were camping on his trail. From bitter experience Red Shirt knew the meaning of that, so he had traveled fast even for an Indian.

It was dark in the cañon when Red Shirt rode into the camp of Colorow. News of the coming cavalry put the whole camp into a ferment.

Foaming inwardly, but outwardly placid,

he urged that the Ute nation here in the cañon, where his son had died, make its great war-fight against the paleface. But Red Shirt was for the safety that lies only in the growing trail. Colorow was a mighty chief, the cañon was good for ambush, yes, but his men were tired and their arrows were few.

The truth was that Red Shirt had a most unhealthy fear of soldier steel. It was Colorow's son, not his, who had been killed. As Colorow's band was afraid to fight unaided, and as Red Shirt and his followers could go on alone, Colorow had no choice but to agree to Red Shirt's plan. An hour's rest was to be taken, however, and, to celebrate the safe reunion of the two bands, they would burn the white captive.

Red Shirt, over whose mind darkly hovered the fear of those trailing cavalymen, carelessly suggested that Mason be set free, and that the Utes send him over the back trail as an agent of peace. The foxy old scoundrel hoped thus to have a friend at court when those blue hounds ran him down. But the death of Colorow's son, who some day would have been at the head of the Ute

(To be continued.)

nation, so his father had hoped, and the disgrace of it all, fired the old chief with a hatred that nothing could cool except wreaking on Mason the most excruciating torture.

He vehemently demanded Mason's torment. He related the death of the Indian that afternoon in the little meadow, the killing of the galloping horseman at the timber's edge, the shooting of the drunken warrior at the head of the branch cañon, and, last and greatest, the scalding disgrace to Colorow himself, and to the whole Ute nation in the death of his eldest son.

Red Shirt yielded.

Mason was tied to a dead tree. The green rawhide encircled only his waist. His arms and legs were free. Around him were heaped dry brush and broken limbs. Seven hundred delighted Indians gathered to watch the human fuel light up the cañon.

Hope left Mason. The fearful strain of the past day and night had all but broken him. The reins of self-control were snapping. The fever of the crazed was beginning to sear his brain. When he lifted his eyes to the stars—ah, the depths there, the cool, free peace! He was not afraid.

LARGEST FERRY-BOAT IN THE WORLD.

THE famous Carquinez Strait is a long, narrow arm of San Francisco Bay, and is located about twenty-eight miles eastward of San Francisco. The main line of the Southern Pacific's limited route between San Francisco and Portland, Oregon, crosses this strait.

The transfer of trains is made by means of a mammoth railway ferry-boat—the Solano, which is the largest railway ferry-boat in the world. In total length this craft is nearly 600 feet, and wide enough for four parallel tracks—representing about 2,400 feet of trackage.

Its capacity is ample to accommodate the very longest and heaviest freight or passenger-train at one time. Originally this immense boat cost the Southern Pacific about one hundred thousand dollars and, since its completion, a large additional sum has been expended in the way of repairs, overhauling, etc.

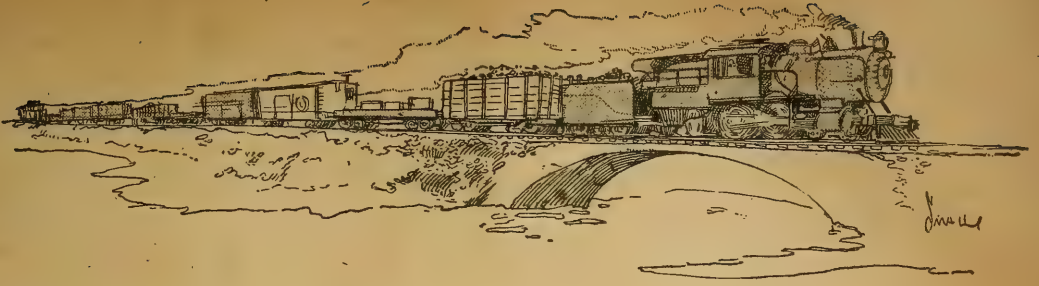
Carquinez Strait is nearly one and a half miles in width, and usually about twenty-five minutes are required in crossing. The Solano is a side-

wheel craft and the engines are of one thousand horse-power, each, making a total of two thousand horse-power driving force.

For a long time the Southern Pacific has been considering the plan of bridging the strait. However, this project has been very strenuously opposed by the old shipping interests of the State, as well as the War Department.

The only kind of structure that could be built across Carquinez Strait without any active opposition would be a suspension bridge. Engineers consider that the latter structure would scarcely be feasible; besides, the cost would be immense. However, at the Dumbarton Point bridge across the southern arm of San Francisco Bay has just been completed, hereafter all of the heavy freight-trains will be sent around that way. This will relieve the immense strain of traffic now imposed on the giant ferry-boat Solano, as well as obviating the necessity of building a bridge at an enormous outlay of money to the system.—*Locomotive Firemen and Enginemen's Magazine.*

Don't let your talk injector get flooded. Keep the check in good condition.—Diary of a Drummer.



The Nerve of Engineers.

BY ROBERT H. ROGERS.

NERVE," so frequently attributed to railroad men, is rather an indefinable quality, but the claim that if an engineer once loses it he will never get it back again, is apparently borne out in many of the anecdotes with which this stirring occupation is necessarily replete. It is remarkable that nerve which will permit the blowing of signals to dead men, and then remain unshaken while wreck after wreck is in review as a nightly pastime, could be shattered by any situation within the ken of man, but any terminal will exhibit more than one former hero of the fast mail now relegated to the plebeian switch-engine because his "road-nerve" is gone.

Startling Incidents That Caused Throttle-Handlers to Suddenly Lose the Peculiar Sense of Security Which Kept Them Calm and Cool in the Face of Danger.

IT goes mighty quick, this thing they call nerve," said Old Tom Roberts, one day, as he was sorting scrap-iron in the foundry yard—an inglorious ending to years of activity on the cannon ball—"mine went when they gave me a lap order on the old Metropolitan road, all single iron, when I was hauling No. 11."

"No. 6, headed my way, was late, and my orders read to pass her at Warrenton, while the other fellows called for the meet to be at Weverton. I know, because I saw his orders afterward. These places were ten miles apart, with Weverton nearest to me, so that I would have to pass it to make the meeting point named in my orders. Fortunately, although I cursed it at the time,

my engine wasn't steaming very good, but his was, so he made an exceptionally fast run, and managed to make Weverton, and get into clear on the turnout, about two minutes before I came through. And I was going so fast that I threw dust on every one of his cars.

"When I saw that train in there I knew that the orders had been mixed, and knew right away how close I had been to getting it. I was that scared thinking over it, that I dropped twenty minutes from there to the end of the division, and I never ran an engine again after that trip.

"They discharged the train-despatcher who lapped the orders, but that didn't do me any good. His 'bull' drove me to this scrap-pile, because, outside of running, this

is all they think I know how to do for the railroad."

The stirring life that railroad engineers lead would appear to be immune to both superstition and sentiment, but it has its full measure of strange, even inexplicable, happenings, which well illustrate that neither emotion is lacking in the make-up of the silent occupant of the engine-cab who handles the night-express at a tearing clip through a world of gloom.

Under certain conditions, his work often begets curious fancies, and it need not be wondered at, because his is a lonely job beyond the belief of those behind in the brilliantly lighted train.

A Tribute to the Dead.

One dark, rainy evening, when the 1330, with the famous Royal Limited, was plunging down Foy's hill at a pace which the fireman tersely described as "like the hammers of hell," two mournful blasts of the whistle sounded unexpectedly overhead.

There was nothing in front, however, no flag, or no signal to be so answered. The headlight shone fitfully on a wall of driving mist, with only the white gleam of a semaphore advancing in arrowy flight to give us the right of way. Some vague curiosity impelled me to seek information, and, when a straight stretch of track permitted, I crawled cautiously around the swaying boiler-butt; and into the cab behind Engineer Parlett.

"What did you blow for, back there?" I shouted in his ear through the wind.

"Walt Furley was killed there," he answered in similar cadence, "at that last signal-pole we passed. He was leaning too far out of the cab, and it struck him on the head. I always toot the whistle when I go by, so that if poor Furley's spirit is about he will know that we haven't forgotten him."

As we sped at reduced speed over the Susquehanna River bridge, the fireman whispered to me confidentially: "He never forgets to blow, and several other engineers do the same thing. It gives me a kind of creepy feeling, though."

It gave me one, too, and small blame could be attached to either. Under the circumstances, there was something inexpressibly weird in that touching tribute to the departed, and the wild night, together with the strident discord incidental to high speed, lent added effectiveness.

Mile after mile in sixty seconds, we had sped through the storm to the accompaniment of the thundering exhaust, roaring culverts, and rattling switch-points, punctuated at regular intervals by the clang, clang of the fire-door, while the gale moaned unceasingly as if an uneasy spirit were in its breath.

In the Wee Small Hours.

I have been on that same run many times at night with refractory injectors and the engine not steaming as she should, but never once have I missed seeing the engineer reach for the whistle-lever at the scene of poor Furley's undoing.

I remember on one occasion, after a long ride on the fireman's seat-box of the Eastern Express, I sought the right side of the cab for company, and incidentally filled the rôle of a rather unwilling listener to some grim revelations as dawn whitened the sky behind Blue Ridge. Until then the engineer, apparently intent on the track and his mysterious "marks"—a sealed book to any one but himself—had scarcely noticed me.

For nearly three hours he had remained practically in the same position on the seat-box, his legs crossed, with his right knee conveniently disposed as a prop for the arm and hand which held his chin, and his left hand resting carelessly on the brake-valve. At irregular intervals, but seemingly in unison with an opening of the fire-door, when the dim interior of the cab would suddenly become suffused with a crimson glow, this habitual though unconsciously effective pose was lost for a moment. He would look at his watch, run his eye comprehensively over the array of gages behind the flickering little lamp, and then over the fireman and myself, but always returning quickly and with automatic precision to the eternal vigil ahead.

Gruesome Memories.

"In about half a minute," he observed, noting my occupancy of a portion of his seat, "we will go by the place where this engine struck a rock once and turned over on John Stevens. It was on this run, too. You can tell easy when you get to it, because she always cuts up a bit in there, though I have never found out why."

Just then the fireman put in another fire; the engineer peered at the water-glass, shut

off the injector, and began his harrowing recital. In rapid succession, while the actual localities, ghostlike in the mist of early morning, flitted by the cab, he pointed to where Dave Ziler and Charley Quarles had been killed in head-on collision, where the 843 had plunged down an embankment, and indicated the very switch over the misplaced points of which the 828 had been converted into a mass of junk.

To nerves not attuned to the symphony of the rail this narration could not be other than disheartening. It requires a long apprenticeship before one can even acquire a fancied security while borne on the wings of the wind by a hundred-ton monster of iron and steel; but when this novel experience is supplemented by a cold, matter-of-fact tale, covering wreck and lingering death, it is small wonder that each unusual tremor of the locomotive gives rise to dread and nameless foreboding beyond the power of words to express.

In moods like this, Providence is devoutly thanked for the presence of that simple brake-valve, because you know that the slightest movement of its stubby brass handle will call into being a mighty giant to seize the wheels in its fifty-thousand-pound grip of steel and grind them to a stop before even two train-lengths have been covered.

When I left the engine at the end of the run, I asked of my eagle-eye friend:

"Do you often think of those things you have been telling me about?"

"Yes, every night when I pass the spots where they happened. I knew all of those men, and they were good men; but they got it, like all of us will who follow this game long enough. I don't think about it when I am off duty, though, because I might lose my nerve."

"Nerve? What do you mean by that?" I asked.

"I don't know," he replied simply. "I've never lost it, so I don't know what it is."

Miller's Last Run.

The circumstances which resulted in the man we will call George Graham, an engineer on a prominent Eastern road, parting with this necessary adjunct to his calling were of a nature so singular that, although fifteen years or more have passed, they are still discussed by the rank and file, but ever without solution.

For a long time Graham ran No. 21, a

fast train which was pulled by engine 42, with Fireman William Miller. Through their close association on the foot-plate, and harmonious intercourse in general, their friendship had come to imply much more than the common acceptance of the term. In fact, so high was the esteem in which the engineer was held by Miller that the latter steadily refused promotion that he might continue as his fireman.

Thus matters stood when Miller was attacked with brain-fever and hurried to a hospital. Graham made a number of trips with an extra fireman, and no doubt would have done so on the fated day had he not, on the previous night, dreamed vividly that his fellow worker was at death's door. Reproaching himself for the neglect which he had exhibited, he arranged for his run to be covered, and hurried to the hospital, taking with him his own physician, Dr. J. L. Moore, now practising in Baltimore, for consultation with the hospital staff.

That morning Miller, whose previous symptoms had been favorable to recovery, became suddenly very ill, and he raved continually from an early hour until noon. The physician who visited him at ten o'clock found him calling repeatedly on George Graham, and begging him not to work that day. There were many other disjointed utterances of which no record was preserved, but the burden of his cries seemed to be that his old engineer was in imminent danger. He did not recognize Graham, who, with Dr. Moore, remained at the hospital.

Exactly at 3.30 P.M. a change came over the sick man, noticeable at once by the attendant. For the first time in many hours his delirium assumed the form of coherent speech, and in a ringing voice, which startled the entire ward, came the words: "We are three minutes late!"

Thinking the case had assumed a crisis, Dr. Moore hurried to administer whatever relief might be possible. He found the patient apparently in the same condition as on his previous visit—high fever, his heart action weak, and oblivious to all surroundings. After a few moments the strident voice continued, with a varying interval between each exclamation:

A Vision that Proved True.

"Hit her up, old man; she is steaming good, and we have only seven cars to-day! She will stand an extra notch on the hill,

if you want to give it to her. See her walk them over Silver Springs! Good old mill, this—and now she—is eating them up through Kensington as though she never had a car! Rockville to Morristown is only a step for her! Two minutes late here, George; but she will have it all back before she is over the flats.”

A pause of several minutes succeeded. It seemed to the engineer that the sufferer was living in his delirium some past run on the express; and Dr. Moore, accustomed as he had become to such ravings, attached no significance to the words, although he remained in attendance. Presently he began again, but this time in a startled tone which struck terror to those who listened:

“What is that freight doing on the main? Look!” and his voice rose into a shriek of dread. “There! Ahead of us!” he cried. “Standing at the water-plug by Harden Bridge! They have overlooked our time! Too late! Too late!”

Suddenly the fireman rose nearly erect on his cot and, pointing in the direction of the clock on the wall, uttered in a tone of awe and solemnity: “Now, George Graham, prepare to meet your God!” He fell back in a deep coma, while the terror-stricken engineer, and even the physician, who was startled out of his professional reserve, glanced furtively at the timepiece. It indicated seventeen minutes after four. Miller never recovered consciousness.

In the meantime the engineer, convinced that something had gone wrong on his run, deserted the bedside of his dying friend and hurried to the roundhouse. Of course, they laughed at him when he said that “No. 1” was into it at Harden bridge; but while in the midst of the banter a hurried call for the wrecking-train brought tragic confirmation to the fireman’s vision.

The fated train had collided with a freight at the exact point where Miller had seen it in his delirium, some twenty-five miles from the terminal. In absolute fidelity to detail, he had depicted the facts in his ravings just as they had occurred. The train left three minutes late; it was two minutes late at Morristown, and met the freight about three miles beyond. The crew of the latter, with orders to run ahead of a following passenger-train, completely lost sight of the fast express thundering to meet them, and stopped at Harden to take water. The wreck occurred at seventeen minutes after four, and the extra engineer and

fireman who were substituting for Miller and Graham, with five others, were among the dead.

That was the end of Graham’s railroad-ing. From that day he never turned another wheel. His nerve was gone and he knew it, and with its passing he dropped forever from the iron trail.

The majority of these distressing cases, however, wherein men have lost their nerve do not embody the supernatural element which seemed to play such a striking part in the passing of Fireman Miller. Often these fancies are almost childlike, especially when entertained by men whose very trade implies a tilt with death from the blowing of the starting whistle to the end of the run.

No better engineer ever pulled a train than Sam Lettner, who not long ago retired from the service of one of the Southern trunk lines. He was driven to the occupation of country storekeeper simply because he believed that some internal convulsion was destined to occur in his new engine which would instantly convert it into scrap.

He was a relic of the old days, before the advent of the compound locomotive, with its bewildering array of rods and cross-heads; and when one of these mechanical marvels fell to his lot, he was afraid of it. He could not reconcile with safety the ever-present spectacle, when at high speed, of whizzing pistons, valve-rods, and what not, all in opposite directions to one another, and utterly at variance with the rythmical thrust of the single connecting-rod to which he had been accustomed; and his mind dwelt constantly on the possibility of a mix-up in the mechanism.

It was in vain that the master mechanic, and even the company’s mechanical engineer, tried to reason him out of this fallacy. While on the road he remained on his feet, actually afraid to sit down from one end of the division to the other. The company had no other engine to give him, and finally the compound got his nerve, so he quit.

These curious mental phases have been explained after a fashion. It is reasoned that in view of the feeling of responsibility which rests heavily on the mind of even the most blasé engineer, though he may never exhibit it, renders him keenly alert; and when alone in the dark with his iron charge, he is apt to prove extremely susceptible to the formation of an idea, or chain of ideas, which often results in a positive delusion.



FOR THE HEART OF EVELYN.

BY RICHARD DUFFY.

**There Was Some Real Gun-Play in the Tower
as the Limited Tore Through the Darkness.**

HALLO! Hallo! Yes, this is Jim Ferris. Who are—oh, hallo, Charley! I didn't know your voice. Yes. I just let number sixteen go through on the new track, all out of breath and an hour late. Lonely here? Well, I guess. Nothing but black woods on every side and the last end of Dunston three miles away."

His eyes swept round the tower as he spoke, taking in all the familiar objects—the line of levers to work the signals and the switches, the big clock, his picture calendar, and the big windows of many little panes, that were wide open on the darkness.

"What's that?" he asked Charley Lennox, who was at the other end of the wire in a tower in the Dunston yards.

"Oh, to-morrow I'll have company," he said, as the question was repeated. "The painter will be fixing up this shack like new. He came to-day, borrowed some tobacco, left his ladders under my window,

and called it half a day's work. Then he went away. Yes, the school is still there up on the hill, but the girls have never been here since. Which one? Oh, yes, I still have her book."

Ferris asked this almost before the other man had got his inquiry over the wire. He turned his head away from the telephone sharply. Some one was rapping on the lower door of the tower.

"That's right," he went on hurriedly. The rapping continued and more insistent-ly. "The limited goes through at 9.30. Not a thing to do till then, except fix my nails and curl my hair. S'long, old man."

Ferris snapped the receiver into its hook and listened a moment to the rapping on the door below. With eyes and ears alert, he stepped softly to his clothes-closet, which stood next the telegraph table. He reached up to the shelf and got his revolver. With the revolver in his right hand and a white lantern in his left, he went over on tiptoe to the door that led down-stairs.

"Who's there?" he called out sternly.

From outside came a faint voice:

"If you please, sir, let me come in."

It sounded to Ferris like a woman's voice.

Then followed quickly a frantic beating of hands on the door and cries of "Help! Please, sir, won't you help me?"

He thought for a moment, then slipped his revolver into his pocket and pulled the chain that opened the door.

Instantly it was opened and slammed shut. Then he heard footsteps on the stairs.

Holding the lantern above his head, he looked down, saying:

"No one can come up here. It's against the rules."

"You must let me in just for a minute!" she cried, and came up panting before him. "My life depends on it!"

He stood in front of her. "So does my job," he said.

She slipped past him into the room; and he turned swiftly, holding the lantern so that he could get a good look at her.

She was not more than twenty and very pretty, though her brown eyes were big with fear and the pallor of her face queer in the lamplight. She wore a summer traveling dress and hat, and carried a light coat on her arm. She glanced here and there timidly. Her whole attitude was that of a woman in a panic of shame and terror.

Ferris's clean-cut, solid face and figure were fixed before her like a human interrogation point. Not a detail of her appearance or expression escaped him. Yet there was nothing offensive or overbearing in his scrutiny. For all his loose shirt, open at the collar and rolled at the sleeves, and despite his steady gaze, the woman faced him confidently. He said with an inscrutable smile:

"Oh, it's you, is it?"

She started violently. "You know me?"

"I know your first name is Evelyn."

"You do?" she queried, incredulous.

He smiled hospitably. "I think your last name is Day."

"I knew they'd do it," she cried excitedly, gripping her hands at her breast.

"Do what?" he asked; but at that moment the telegraph began to click and he passed behind her to his table. She walked after him, fearfully and as if by mechanical imitation.

Laying the lantern under the table and his revolver on it, he sat down to take the message. As he did so, he motioned to

a chair close by, saying, "Won't you sit down?"

She was sitting with her back to him, and he glanced her way from time to time. She was mumbling something. Just as he finished his receipt of the message, he saw her slyly get hold of the revolver.

He grabbed her wrist. He leaned over and gently forced it out of her hand, saying:

"I beg your pardon. This is my gun. Where's yours?"

He put it on the shelf of the closet and shut the door, standing with his back to it.

"Give it to me! Give it to me, please!" she pleaded hysterically.

He led her back to the chair and sat her down.

"You've got to play with your own. That's mine," he told her, laughing.

Throwing her hands to her face, she began to sob heartbrokenly, "Don't make fun of me."

"Make fun of you?" he inquired, bending over her. "Why—"

The telephone-bell rang. It was Lennox again, asking that Ferris read to him the special order to be sure they had it right.

Ferris read from the flimsy sheet on his file:

"The president of the road in a special follows on the heels of the limited.' Only God Himself can stop either one of them!"

He hung up the receiver, went to his levers, and, as he worked one, found the young woman standing beside him.

"What did you say?" she asked huskily.

"Excuse me, please, if that sounded like swearing; but there's something doing to-night."

She seemed to have recovered her poise and said sharply:

"I came here to stop the limited. I must reach New York before—"

"This is a switch-tower; not a station. You know that, Miss Day."

"How do you know my name?"

"I know you a good deal better than you think," he answered enigmatically, and kept his eyes on hers.

She felt somehow that this man did know her; but how, she did not try to divine. It was enough that he seemed to like her. In her desperation, though it was ignoble, she swiftly decided to play on whatever sympathy he might have for her.

She laid her hand softly on his arm, and was ashamed because the contact changed

him so. His face flushed, his eyes brightened, and he took up her hand as if to kiss it. Then, suddenly, he pushed it away from him.

She stood very near him.

"You will stop the limited for me, won't you. It means life or death to me." Her voice had fallen to a whisper.

He looked down at her sharply. "Say, you're running away from the school over there, aren't you? To get married?"

She fell back shrinkingly. "I knew they'd do it. They've sent out an alarm for me."

"I didn't know it. I just guessed it, Miss Day."

Far away, a whistle, long and shrill, pierced the air.

"Limited passes in twelve minutes," Ferris said, as if talking to himself, and proceeded to try several of his switch-levers.

The girl glanced about the room wildly. Suddenly she saw the red lantern under the table. She took it up and was making for the door.

Ferris sprang in front of her.

"They can't blame you for this," she cried, striving to work by him.

"Give me that lamp!" he commanded roughly.

She gazed up into his steady eyes pleadingly.

"It's life or death for me!"

He put his hand over hers and gradually forced the lantern out of her grasp. Having put it back in its place, he said very quietly:

"It's life or death for two hundred passengers."

The limited's whistle sounded again, and nearer.

"It's coming! It's coming!" she cried hoarsely, and ran to the stairway.

Ferris caught her just as she was starting down and pulled her back into the room.

"What are you going to do?" he asked.

She faced him smiling and said with quiet despair:

"I must stop the train somehow. Mr. —, I want to tell you something. You seem to know about me, as you said, and though I came over here with some of the

girls from the school last fall, I don't ever remember seeing you.

In fact, I remember I hadn't the slightest interest in coming here. You see," her eyelids fell and a blush showed in her cheeks and neck—

"you see, I was very much in love. Tonight I ran away with the man—"

"You have not married him, have you?" Ferris asked sharply.

"No," she answered lifelessly.

"He said we'd go to New York at once and be married. We took dinner at the Mountain House."

Tears began to stream from her eyes.

"Then he told me that we couldn't go to New York to-night, as he didn't have enough money. I gave him what I had—but he said, too, that we

were registered at the Mountain House as man and wife, and—"

She stopped in a fit of sobbing.

"Don't cry! Don't cry!" said Ferris. "Tell me!"

"I stole away while dinner was being served and came here—"

"Why didn't you go to Dunston and get the 8.30 train?"

"Is there an 8.30 train?" she asked, bewildered.

"Summer schedule. In effect to-day. But you're not going to New York. You're going back to the school."



FROM OUTSIDE CAME A FAINT VOICE.

She shook her head sadly. "I left them a letter this afternoon. They believe I'm on my way to New York. They'll have telephoned father—oh, can't you see that if I could only get to him to-night—"

A heavy hand, beating on the door below, startled them. They were silent, listening, cautious. The knocking was repeated.

Ferris put his finger on his lips as a signal to her, and led her to the closet, shutting the door half-way.

"A track-walker," he whispered. Then he went to the door and called down:

"That you, Bill Sammis?"

The girl pulled the closet door shut on herself.

"Who's down there, anyway?" Ferris yelled.

The head of a ladder appeared in the window, and as Ferris turned in a flash at the sound, he saw a man spring into the room.

In a glance, Ferris had comprehended his good figure, good clothes, his air of assurance, and his handsome, suspicious face of pasty complexion.

"A kind of a lady's novel hero," was the railroad man's mental note.

The man smiled, showing white, even teeth under a close-cut black mustache. Ferris scowled.

"Good evening, Mr. Towerman," he began pleasantly; "my name is Wainwright."

"My name is Ferris—and there's the door," he retorted calmly; "and you can't go too quickly. I'm busy."

A bit nasty, aren't you?" said Mr. Wainwright, looking all about him. "It's the heat, I suppose."

"No," said Ferris, "it's you."

"Me? Why, you don't know me."

"That's just it," said Ferris. "This way out." He pointed to the door.

"That's true, I haven't got much time," Mr. Wainwright went on blithely. "I want you to stop the limited, Mr. Ferris, and I pay in advance."

He tossed a fat bundle of bills at the towerman's feet.

Ferris kicked the bills back to him across the floor, saying with composure, "The company pays me, Mr. Wainwright."

Mr. Wainwright stared at him, then laughed a short, ironical laugh as he picked up the bills and put them in his pocket.

The whistle of the limited shrieked again. It seemed as if it must pass the tower the next moment.

Ferris stepped to the telegraph-table and began to click off a message. Mr. Wainwright's beady black eyes had been following the towerman's every movement and expression. But suddenly they fixed themselves on the closet door.

"Calling for help, are you?" he asked the towerman.

Ferris lifted up his head to glare at the intruder, and found himself covered with an automatic revolver.

"I was going to explain to you courteously why it's absolutely necessary for me to board the limited. But you're a bit thick in your way. Time flies. Be quick, Mr. Ferris, look at that closet."

Ferris did look and his heart stopped for an instant. A bit of white lined was sticking out at the foot of the door.

"You've no right to be here, get out!" Ferris roared.

"As much right, I fancy, as your sweetheart has," the man returned suavely.

"You lie!" Ferris cried, raising his arm as if to strike.

Still smiling and polite, Mr. Wainwright advanced and aimed his weapon at closer range, saying:

"About three feet above that innocent bit of white a bullet should find her heart—a foot higher, let's say, her head."

"If you shoot that woman—" Ferris began, but Mr. Wainwright interrupted him.

"You love that little girl in there better than your job, I'm sure. Be a man! Save her!"

Mr. Wainwright's five feet ten of bone and muscle were perfectly poised on his feet, and, as he kept his revolver conveniently disposed either to force Ferris to the levers or shoot through the thin pine door of the closet, he seemed to be trying to exert a malign influence over the towerman with his beady eyes and hard smile.

The cold sweat stood on Ferris's forehead as, facing Mr. Wainwright all the time, he found his way to the levers. Five minutes were left to him in which to decide the paramount crisis of his life. Mr. Wainwright had said he loved the girl in the closet better than his job. How he hated the smooth, smirking intruder! And how did the fellow know he loved the girl?

Ferris wiped his sweaty hands on a cloth as he got ready to work the switches. Meanwhile he mumbled their plan to himself in a maudlin way, like a man bereft of his will.

"Limited—track four," he babbled, "freight on siding—track two president's special—three minutes—one hundred—two hundred passengers—only God Himself—"

He swayed and went suddenly dizzy so that he leaned helpless against his levers.

Mr. Wainwright was at his side instantly, patting his shoulder and whispering:

"It's all right, old man; it's for the girl! The heat's got you! Tell me which one to pull and I'll do the—"

The touch of the man's hand went through Ferris like an electric shock. He jumped back from the switches and fairly screamed:

"No, you won't, and I won't either! My orders stand!"

"I'll kill her, then!" Mr. Wainwright growled, and made a dash toward the closet.

Ferris sprang after him.

The closet door flew open and, holding Ferris's revolver before her, the girl almost leaped into Mr. Wainwright's arms.

At first glimpse of her he staggered back with a cry:

"Evelyn!"

But she was past him, beside Ferris, who had grabbed his weapon from her.

Mr. Wainwright's arms had fallen to his side.

"Shoot now," the towerman suggested. "Odds are even."

Mr. Wainwright mopped his brow with the air of a gentleman reasserting himself, quietly slipped his pistol into his pocket, and laughed a long, hollow laugh.

"Mr.—Ferris, I believe you call yourself, it appears you have already met my wife. Introductions are unnecessary."

The limited tore by the next moment with a pounding roar.

"That isn't true," the girl protested. "You know it isn't true."

She remained still near the towerman, who, though occupied with his levers, contrived to keep his revolver ready in his right hand.

"I am very sorry we have given you any trouble," said Mr. Wainwright loftily, and advanced to take her. "I'll see you are rewarded for doing your duty."

Ferris swung round as if on a pivot and, his revolver almost touching the man's temple, he said:

"I want your gun!" Without another word he took it from the man's pocket. "Now you stand nice and quiet for a minute while I tell you something. I won't keep you long, but I must tell you."

"I don't think my wife and I need to continue this acquaintance any longer, Mr. Towerman," retorted Mr. Wainwright, nervous, but sneering.

"Don't be sassy," said Ferris, grinning. "This gun is so near your head that if it went off I couldn't stop it from hitting you. You thought you did a pretty slick trick in persuading this young lady to run away, thinking you would take her to New York and be married. But you overdid it. That was a mistake to write her down on the book at the hotel. She didn't even mean to have dinner with you. But she had to carry out the game a little farther than she expected. You see, she was bound for me in the first place. But she had to go to Dunston to get a train to come out here, where I have two friends, a man and his wife, coming as witnesses. You can't ask a girl to walk three miles along the railroad-track alone, a hot night like this, especially when she's dressed up to be married."

Mr. Wainwright stared incredulously at the towerman, and then glanced at the girl. She was leaning against the wall, quivering as if with palsy, her face hidden in her hands.

"You common liar—" Mr. Wainwright began.

"Look out!" Ferris cried, pressing the barrel of the pistol against Mr. Wainwright's temple. "I know it's loaded! Evelyn," he went on quietly, "get me that paper book on the table. 'The Precipitate Marriage,' you remember."

When she heard him call her by her name she was startled. She looked at him, and his steady gray eyes had a command in them she had never seen before.

She went over to the table, found the paper novel and brought it back to him dutifully.

When Mr. Wainwright tried to catch her eyes she turned her face away, and, as if in a daze, slunk back to the table.

Ferris handed the novel to Mr. Wainwright and bade him read the inscription on the fly-leaf.

"'Evelyn Day to James Ferris,'" the man read, and added quickly, "but your name is not in her handwriting. Do you think you can put up a—"

"That was just the idea, you see, Mr. Wainwright. Her name in her handwriting, and my name in mine. It was the first token of our betrothal. It's a silly story about a girl that runs away with a rascal.

She was reading it about the time you came in view. It didn't take long for me to show her just what you must be, but you didn't show her yourself until to-night. Clever, you are.

"It was my idea—and I got it from the book—to have her pretend she was running away from you, because you happened to have the clothes, the manner, and the influence up there at the school so they'd

The towerman gradually had driven him to the window.

Mr. Wainwright called across the room in a whine of fear and hopelessness:

"Evelyn, are you going to permit this?"

The girl had fallen on a chair. Her arms and head lay limp on the table. It seemed as though she had fainted.

Cool, determined, his eyes missing no shade of movement or expression in Mr.



"SHOOT NOW! ODDS ARE EVEN!"

let you take her walking in the grounds. Clever you are, but not clever enough."

"Do you think I'm going to believe this tommyrot?" Mr. Wainwright asked. "Why, I've written her—I've seen her—I've—"

"Stop! She's my promised wife," Ferris growled. "I know all about you, and I've told you all I'm going to say. You can go. The ladder's your way and you came in here by force, like a burglar. Go the same way."

Wainwright, the towerman forced him down the ladder. He even showed him the courtesy of holding a lantern.

"I'll get you for this!" Mr. Wainwright cried hoarsely. "And inside of twenty-four hours."

"Follow the track straight to Dunston," Ferris replied imperturbably. "There's a train to New York at midnight. But keep an eye out for the president's special. It passes here in ten minutes."

Mr. Wainwright was about to say some-

thing, but the figure of a man loomed up abruptly before him, and he started away on a run.

It was Charley Lennox, who, with his wife, had driven out in his buggy, in answer to the message Ferris sent when Mr. Wainwright first appeared in the tower.

"What did you bring Laura and me all the way out here for?" he called up to the window. "Say, was that a yeggman, Jim?"

"Something just as good, Charley. Wait a minute and I'll let you up."

Lennox shouted, "What's all the mystery about, Jim?"

But Ferris had stepped back and hurried to the inert figure at the table. He laid his hand gently on her shoulder, and the girl sat up and stared about her, uncomprehending. Then she began to weep.

"Please don't cry," he pleaded. "I had to do it. I had to do it. Telephone your father right away and explain things. Please stop crying. It tears me all to pieces, Miss Day. You can go right back to school with Charley Lennox and his wife. She's a nice woman and will make them understand there. I'm awfully sorry I had to say all those things to get him away, but see what a fix you were in.

"And—and—well, I do really love you, and I have, since you were here that day and forgot the book. The other girls forgot things, too—handkerchiefs, and a parasol. I sent those things back, but I kept the book and wrote my name in it, though I never thought to see you again. Why, I even read that fool story, and I never read anything but law books and railroad things because, you see, I'm studying. I'm glad I read it now; it helped me to guess about you when you came."

She stood up and faced him. He could make nothing of that sad expression.

"You've done everything for me," she said, "and I can't tell you what I—" She stopped, and the tears came anew.

His eyes flashed. "Will you tell your father about me sometime?" he asked. "If he saw me, perhaps—please look at me or, I can't say it."

She cast her big dark eyes, sparkling with tears, honestly, timidly upon him.

He opened his lips, but his voice had left him. Then he stammered nervously, "I can't say it at all, I guess," and, taking her hand, he kissed it reverently.

She still allowed it to rest in his clasp as they walked together to the door to admit Lennox and his wife from below.

WAITING FOR NEWS OF A WRECK.

RICHARD BOYDSTEN, until recently an operator at Tunnel, the next station above Palisade, Colorado, ordered physicians and wreckers to take care of the dead and injured on Denver and Rio Grande passenger train No. 6, which for thirty minutes he believed he had sent over the mountainside, near Debeque, with a consequent loss of dozens if not hundreds of lives, has given up telegraphy for good.

Boydsten has auburn hair, and, although it has not changed color, he declared that he would have sent a bullet into his brain when he learned of his error had he had a gun.

"I realized almost immediately after the passenger had passed Tunnel what I had done," says Boydsten. "I had orders to hold the east-bound passenger for a freight which had just passed Debeque. I forgot to deliver the order to hold No. 6.

"I knew that it would result in the worst wreck in the history of the road, for the two trains were bound to meet on the hill in the cañon. I called Debeque, hoping against hope that the freight had not passed out of the yards, but was too late.

"I have read in magazines of the awful experi-

ences of operators who had made just the mistake I did, but I don't believe they tell half the awful feeling a man has who thinks that he has sent a hundred passengers to certain death.

"I prepared for the worst, sent an order to Grand Junction for a wrecker, and asked for a dozen physicians. Then I waited. I could not leave the key to look for signs of a burning wreck, for the despatcher kept asking for particulars.

"Finally, when I felt certain the wreck had occurred, I looked in the drawer for a gun, intending to kill myself, but it was not there, and I decided to await the inevitable. Just then Debeque called and said the freight-train had backed into the yards, closely followed by the passenger.

"It seems the reflection of No. 6's electric headlight was seen by the engineer of the freight just as he was approaching the steepest down grade in the cañon.

"He thought at once something was wrong, reversed his engine, and stopped the train within a short distance of the passenger. Had he gone over the brink of that hill no power on earth could have stopped his train, and many lives might have been sacrificed."

In the "Good Old Days" of Railroading.

BY SAMSON D. PLATT.

FEW stories can be so interesting to railroad men of to-day as those of the early days of railroading, back in the three decades from 1835 to 1865, during which time the railroad, both in England and America, went through the stages of superstition, abuse, political objection, and the calumnious interference of those who looked upon it as the convulsion of a diseased mind.

Such stories and facts as those which Mr. Platt has gathered here, and which Charles Frederick Carter told in "Early Railroad Days in New England" in our November number, are both startling and laughable. Truly, the "greatest industry in the world" had some queer and thrilling moments before it reached the plane of peace and perfection.

Stories of the Days When Stephenson Was Considered a Nuisance, and When Going Aboard a Train Was Declared as Unsafe as Being Fired from a Cannon.

BACK in 1756, it took our great-great-grandfathers three days to "stage it" from New York to Philadelphia, and under Washington's administration, two six-horse coaches carried all the passenger traffic between New York and Boston—six days each way.

It was a long step from this to the overland travel of half a century later. The first great transcontinental stage line, and probably the longest "continuous run" ever operated, was the Butterfield "Southern Overland Mail." Its route was two thousand seven hundred and fifty-nine miles from St. Louis to San Francisco. It ran *far to the south*, through El Paso, Yuma, and Los Angeles, to avoid the snows of the Rockies.

For this tremendous distance, its schedule time was at first twenty-five and then twenty-three days; its record run, twenty-one days. Its first coaches started simultaneously from St. Louis and San Francisco, September 15, 1858. Each was

greeted by a mighty ovation at the end. Through fare, one hundred dollars, gold; letters, ten cents per half ounce. The equipment consisted of more than one hundred Concord coaches, one thousand horses, five hundred mules, and seven hundred and fifty men, including one hundred and fifty drivers.

It began as a semiweekly stage, but was soon promoted to six times a week. The deadly deserts, through which nearly half its route lay, the sand-storm, the mirage, the awful thirst, the dangerous Indian tribes, and its vast length—forty per cent greater than that of any other stage-line in our history—made it a colossal undertaking; and the name of John Butterfield will always be remembered as one of the Americans who helped to win the West.

2,000 Miles in 18 Days.

This "Southern Overland Mail" was operated until the Civil War utterly precluded mail-carrying so far south, and the

Overland had to be transferred to a shorter northern route; where it took its chances with the snows. The first daily Overland stage on the "Central" line left St. Joe and Placerville, simultaneously, July 1, 1861, and each finished its two-thousand-mile trip eighteen days later.

Over one hundred thousand emigrants crossed the plains from 1846 to 1860. There is no tally of the freighting enterprises that sprang up on the heels of this vast migration. By the sixties, five hundred heavily laden wagons sometimes passed Fort Kearney in a day. In six weeks in 1865 six thousand wagons, each with from one to four tons of freight, passed that point.

The height of prairie freighting was the period from 1850 to 1869; its climax was from 1850 to 1866. The floating population then on the Western plains was nearly 250,000. In 1865, over 21,000,000 pounds of freight were shipped from Atchison alone, requiring 4,917 wagons and 8,164 mules, 27,685 oxen, and 1,256 men.

The firms engaged in carrying freight were many; their men an army; their "cattle a host." One firm, Russell, Majors & Waddell, employed 6,250 big wagons and 75,000 oxen. This may give some faint idea of the mighty traffic in the early days when the frontier was a baby.

Train of Prairie Schooners.

The standard organization of such a train was twenty-five of the huge, long-gear "prairie schooners," flaring from the bottom upward, and sometimes seventeen feet long, with six feet depth of hold, and capacity of from 5,000 to 16,000 pounds each—each with six to twelve yoke of oxen.

The men of the outfit were a captain, or wagonmaster, his assistant, a night herder, a driver who had charge of the riding horses, and a driver for each wagon.

The ox-drivers were universally known as "bull whackers," and their beasts were "bull teams."

The huge "Conestoga," "Pittsburgh," or "Pennsylvania" wagons cost \$800 to \$1,500 each; mules, \$500 to \$1,000 a pair; harness, \$300 to \$600 to the ten-mule team—a total of \$2,600 to \$7,000 per wagon, besides salaries, provisions, and incidentals. A first-class freighting outfit on the plains, half a century ago, cost as much as an up-to-date vestibuled passenger-train of to-day.

The largest train ever organized was that

of General Custer, in his 1868 campaign. He had over 800 six-mule teams. Single file, they reached four miles.

The establishment of regular freight caravans from the Missouri River westward greatly reduced the cost of transportation and developed business and immigration. In the days of pack-trains, it was no uncommon thing to pay \$1 per pound per 100 miles, or \$20 per ton per mile. There have been regular tariffs much in excess of this, but this was common. Everything went by the pound. The trip took twenty-one days for wagons drawn by horses or mules; five weeks for ox-teams.

Records of the Pony Express.

The quickest time ever made across the continent, by the Butterfield stage line was twenty-one days. Its schedule for mail from New York to San Francisco was twenty-three days. The Pony Express more than cut this in half. Not only did it never once fail to span the transcontinental desert in ten days; it more than once surpassed any other courier record in history. Buchanan's last message was carried by it from St. Joe to Sacramento, 2,000 miles, in seven days and nineteen hours; and the news of Lincoln's election was carried 665 miles in two days, twenty-one hours. It hustled Lincoln's inaugural across the 2,000-mile gap in seven days and seventeen hours. This is still the world's record for despatch by means of men and horses.

There have been times when a railroad train could not reliably cross the continent as swiftly as did the best of the Centaur-Mercuries, organized by that typical frontiersman, Alex. Majors, who died about ten years ago.

In his youth, Majors made the broad-horn record on the Santa Fe Trail—a round trip—with oxen in ninety-two days. Later, he took up government contracts, and, in 1858, was using over 3,500 large wagons merely to transport government supplies into Utah, employing there 4,000 men, 1,000 mules, and more than 40,000 oxen.

When Holladay Was King.

Between Leavenworth and Denver, Majors had 1,000 mules and fifty coaches. The first of these "horse-power Pullmans" reached Denver May 17, 1859, six days for the 665-mile journey. Horace Greeley,

Henry Villard, and Albert D. Richardson were passengers. The Holladay & Liggett stage line from St. Joe to Salt Lake had, in 1858, frittered twenty-two days in its semi-monthly trips. Majors cut the 1,200-mile run to ten days, with a coach each way daily. The stage from Denver to Salt Lake had a run of over 600 miles without a single town, hamlet, or house on the way.

By 1859 there were no less than six mail routes to California, but Ben Holladay was king. No other one man, anywhere, has owned and managed a transportation system at once so vast and so difficult. He had sixteen first-class passenger-steamers plying the Pacific from San Francisco to Oregon, Panama, Japan, and China. At the height of his Overland business he operated nearly 5,000 miles of daily mail-stages, with about 500 freight wagons, 5,000 horses and mules, and a host of oxen.

On the main line, he used 2,750 horses and mules, and 100 Concord coaches. It cost \$55,000 for the harness; the feed bill was \$1,000,000 a year. To equip and run this line for the first twelve months cost \$2,425,000. The government paid Holladay a million dollars a year in mail contracts. In 1864 grain was worth twenty-five cents a pound along the line, and hay up to \$125 a ton. In one day Dave Street contracted, at St. Louis, for seven Missouri River steamers to load with corn for the Overland's army of mules and horses.

Ben Holladay was the Overland king for about five years, beginning in December, 1861. The Indian depredations of 1864-1866 greatly crippled his stage line, nearly all the stations for one hundred miles being burned, his stock stolen, and his men killed. The loss was upward of half a million. In November, 1866, he sold out the Overland stages to Wells, Fargo & Co., in whose hands the romantic enterprise continued till the railroads drove the stage from the plains forever.

Odd Happenings 75 Years Ago.

The year 1834 was an odd one in the railroad world, and here are some of the things that happened:

The directors of the Lake Erie and Mad River Railroad Company, meeting at Urbana, Ohio, announced their determination to build thirty miles of road the ensuing spring.

An advertisement of a house for sale in Maryland gave the location as "Ellicott's Mills, 13 miles from Baltimore upon the Baltimore and Ohio Railroad, where all cars to and from the West stop to breakfast and dine."

A letter of William H. Seward, Whig candidate for Governor of New York, "containing strong expressions of friendship for the New York and Erie Railroad," was incorporated into a political hand-bill and widely circulated as a campaign document. The Democrats denounced the letter and its author thusly: "In the north and along the canal, Seward is opposed to the railroad, which he represents as a rival work, designed to divert business from the canal; in the south, his letter is to gull the people into his support by his professions of friendship for their interest."

The New York papers containing the election results of "the city and vicinity" were placed in Philadelphia in five hours by the Camden and Amboy Railroad. The "extras" were taken by steamboat to Amboy, there transferred to the train, carried over the fifty-six miles of the road to Camden terminus, and finally loaded upon a horse, which brought up in the Quaker City. The speed on the railroad was about thirty miles an hour.

Car Fell Between Rails.

An accident that will puzzle modern railroad men befell "the locomotive engine Augusta, near Windsor, South Carolina, with a train of twenty cars, loaded with cotton, three of which were ahead of the locomotive and the remainder in the rear," says the report. "From some occurrence, the foremost freight-car fell in between the rails, and of course forcing the following two down with it. Before the locomotive could be possibly stopped, she was precipitated upon the freight-cars, and one loaded car immediately behind was drawn down. The engineer was fatally injured."

During the year ending October 1, 1834, 182,211 barrels of flour were announced as reaching Baltimore over the lines of the Ohio Railroad. It was predicted that "when the road is opened to Harper's Ferry, which will be in about a fortnight from this time, the supplies will receive a gradual but steady augmentation from the Shenandoah Valley."

During the same yearly period, the same

conveyance brought to Baltimore 801 hogs-heads of tobacco, 522 tons of grain, 741 tons of meal, 160 tons of provisions, 23 tons of live stock, 130 tons of whisky, 7,723 tons of granite, 70 tons soapstone, 1,568 tons of paving-stone, 1,231 tons of lime and limestone, 997 tons of fire-wood, 114 tons of lumber, 244 tons of bark, 1,138 tons of ore, 1,518 tons of iron, 176 tons of leather, 457 tons of hardware, 15 tons of cotton goods, and 32 tons of paper.

A bill for the opening of a "continuous railroad from Philadelphia to New York" was reported in the New Jersey Legislature, on November 13, 1834.

Caught in the Rope!

An engineer lost his life through the explosion of the boiler of an engine that was "conveying a train of burthen-cars near Baltimore on its trial, under the management of its builder, preparatory to an acceptance on the part of the Baltimore and Ohio Railroad." Evidently the builder got disappointed about the acceptance.

One of the first violators on record of the "don't-alight-while-the-train-is-in-motion" rule was a citizen of Lowell, Massachusetts, who, in making his premature jump, "got entangled in the rope and fell across the rail."

A New Jersey newspaper computes the number of passengers carried during 1834 by the railroad of that State—the Camden and Amboy—at 150,000, against 40,000 of two years before.

"Indeed, during the last few weeks," said this journal, "the crowd traveling daily has been almost too great for comfort and convenience. In another year, a single line of railroad will be insufficient to transport the vast number of persons seeking transportation between New York and Philadelphia."

While laying the rails of civilization through the then unsafe territory between Washington and Baltimore, two pioneer superintendents of construction were "slain by robbers" eighteen miles outside the latter city.

\$120 the Daily Earnings.

The opening of thirty-two of the proposed forty-two miles of the Boston and Worcester Railroad was celebrated with a banquet by the directors of the line. Cars

were regularly running twice a day from Boston to Westboro, and it was estimated that \$120 a day was realized from passengers and freight.

A detachment of militia left Baltimore for the scene of a railroad riot in Anne Arundel County, Maryland, on November 27, 1834.

Things were a little better a quarter of a century later, in 1859-1860.

The right to use steam within the Brooklyn city limits expiring in April, 1860, cars to be drawn by horses were ordered constructed for the Brooklyn Central Railroad Company line on Atlantic Street. It was proposed to extend the horse railroad to East New York, and then use steam to Jamaica.

A wandering ox caused the death of eleven persons and the injury of twenty-six in a railroad accident near Watertown, Wisconsin. The animal was crossing the track when caught by the cowcatcher of a passing train and carried a dozen rods, when it fell under the locomotive, which was traversing a bridge over a small creek. The locomotive was instantly precipitated into the creek, the baggage-car and five passenger-coaches following it.

Early Rescue from Cowcatcher.

That railroad men who from the cowcatchers of racing locomotives rescue careless children on the track, are not essentially present-day products, is attested by this item in a Pennsylvania newspaper:

"As one of the freight-trains coming east rounded a sharp curve near Barree Siding, a station about twelve miles west of Huntingdon, the engineer saw a small child sitting in the middle of the track, playing, unconscious of its danger. He instantly whistled down brakes and reversed his engine, but the weight of the train and the high speed at which it was running rendered it impossible to stop before reaching the child. In the emergency, when most men would have stood paralyzed with horror, Daniel McCoy, the conductor of the train, ran to the front of the engine, ran down onto the cowcatcher and, holding to it with one hand, leaned forward as far as possible, and when he approached the child, with a sweeping blow of his free arm threw it off the track. The train was immediately stopped, and on going back, the child was found lying at the foot of a small embankment

twenty feet from the track, but slightly stunned and bruised."

Under the headline, "Quick Time from Mobile," a New York journal says:

"We received yesterday (Saturday) afternoon files of the Mobile, Alabama, papers of Tuesday. These papers came over the Mobile and Ohio to Okolona, thence to Oxford, Cairo, Chicago, Detroit, Niagara Falls, and Albany to New York—1,777 miles by railroad, 62 miles by stage, 23 miles by steamboat, a total distance of 1,862 miles, which was accomplished in 101 hours."

An Armed Posse.

Signs of trouble between Eastern and Western railroads were reported. Two New York roads withdrew from an agreement which fixed the winter passenger rate from New York to Cleveland at \$14. The two dissenting roads made the fare \$13—but a half-dollar above the summer rate.

The Baltimore and Ohio Railroad sent an armed posse to Harper's Ferry, the scene of John Brown's capture a few months before, to guard the bridge and property of the company at that point.

The directors of the Baltimore and Potomac Railroad announced that they were confident of the success of their projected work and were making every exertion to forward its commencement.

Southern planters were informed that they could send their cotton to the Atlantic seaboard by the Illinois Central and other railroads running east from Chicago, at a cost of \$4 per bale, as against \$5.25 per bale cost via New Orleans and the sea. It was also pointed out that the new rail routes were thrice as speedy as the old means of transportation.

The first train over the Victoria Bridge at Montreal carried several directors of the Grand Trunk Railroad and made the passage in twelve and a half minutes.

The case of George C. Bates against the Illinois Central Railroad in the United States Court, involving the right of the defendants to their depot property in Chicago, was decided in favor of the road. This was the second time the case was tried with the same result.

It was stated that the remaining three-fifths of the required quarter of a million dollars had been raised in Louisville for the Southern Pacific Railway, and that Mr.

Thompson's acceptance of the presidency and the immediate extension of the road was thereby assured.

Railroads Declared Ridiculous.

"As to those persons," said the *Quarterly Review*, of London, in 1832, "who speculate on making railways generally throughout the kingdom, and superseding all the canals, all the wagons, mails, and stage-coaches, post-chaises, and, in short, every other mode of conveyance, by land and by water, we deem them and their visionary schemes unworthy of notice. Every particular project must stand or fall by its own merits; and we are greatly mistaken if many of those which are already announced will not, when weighed in the balance, 'be found wanting.' The gross exaggerations of the powers of the locomotive steam-engine (or, to speak in plain English, the *steam-carriage*), may delude for a time, but must end in the mortification of those concerned. What, for instance, can be more palpably absurd and ridiculous than the following paragraph, in one of the published proposals of what we should call a hopeless project?"

The scheme here alluded to was laying down a railway between the metropolis and Woolwich, in which it was considered that "twice the velocity" of the coaches might be attained, combined with "greater safety." The anticipation that, by the agency of steam, travelers would some day proceed "at the rate of four hundred miles a day, with all the ease we now enjoy in a steamboat, but without the annoyance of seasickness, or the danger of being burned or drowned," called forth the indignation of the reviewer.

Four Hundred Miles a Day! Awful!

"But with all these assurances," he adds, "we should as soon expect the people of Woolwich to suffer themselves to be fired off upon one of Congreve's *ricochet* rockets, as trust themselves to the mercy of such a machine, going at such a rate."

A rumor that it was proposed to bring such a thing as a railroad within a dozen miles of a particular neighborhood, was sufficient to elicit an adverse petition to the British Parliament, and a subscription to oppose so fearful a nuisance. The London and Birmingham line was thus compelled to change its intended route through North-

ampton, and to keep at a respectful distance; lest, said some of the worthies of that town, the wool of the sheep should be injured by the smoke of the locomotives (though they burn coke); and, therefore—philanthropic souls!—they required that the purity of their fleeces should be preserved unsullied from the plutonic cloud, by giving the benefit of it to the farmers of Blisworth and its neighborhood. This argument is somewhat enriched by the remembrance of the fact that Northampton was chiefly known as a large boot and shoe manufactory.

Nor would those seats of learning, Oxford and Eton, permit the Great Western bill to pass, without the insertion of special clauses to prohibit the formation of any branch to Oxford, or of a station at Slough; while it was declared by the authorities of the school, that anybody acquainted with the nature of Eton boys would know that they could not be kept from the railway if it were allowed to be constructed.

When the directors subsequently attempted to infringe the conditions with which they had been bound, by only stopping to take up and set down passengers, proceedings were commenced against them in Chancery, and they were indicted.

He Hated the Word!

While one of the first railroads of Great Britain was being experimented, an army officer assured the House of Commons that "railways were dangerous and delusive speculations"; that "such schemes were dangerous, delusive, unsatisfactory, and, above all, unknown to the constitution of this country"; and that "he hated the very name of a railway—he hated it as he hated the devil."

When the London and Birmingham line was proposed, a whole chorus of voices shouted objections, or uttered withering sarcasms on the project. It was declared that it would be "a drag on the country"; that its works would soon be ruins for the antiquary to study; "and that every hill and valley between the two towns would behold falling arches and ruined viaducts."

Others declared that canals would soon attain such efficiency that railways would be superfluous; that the charge for transit by the canals would be far less than by their rivals, *and the speed very much greater.*

Medical men asserted that the tunnels

would be peculiarly dangerous in producing colds, catarrhs, and consumption; and that the deafening peal, the fearful gloom, the clanking chains, the dismal glare of the locomotive, and a thousand other horrors, which they vividly depicted, were so alarming, that *such inventions ought to be utterly repudiated.*

But the people were not to be fooled by such cobweb ideas, and, in spite of all objections, the railroads began to find many promoters. These men, especially in England, pictured the possibility of get-rich-quick schemes that many people were going bankrupt to secure shares.

The Share Holders

"Every man of the present day," said a facetious writer seventy-five years ago, "is a holder of shares in a railway; that is, he has got some pieces of paper called scrip, entitling him to a certain proportionate part of a blue, red, or yellow line drawn across a map, and designated a railway. If the colored scratch runs from south to north, it is generally called a Trunk-line; if it 'turns about and wheels about' in all directions, leading to nowhere on its own account, but interfering with every railway that does, ten to one but it is a Grand Junction; and if it lies at full length along the shore, it is a Coast Line. Trunk-lines are generally the best, because the word trunk naturally connects itself in the mind of the public with the idea of luggage, and a good deal of traffic is consequently relied upon. Grand Junctions are good speculations, as troublesome customers, likely to be bought off by larger concerns, which would consider them a nuisance; and as street nuisances generally expect a consideration for moving on, a Grand Junction may ask a good price for taking itself off from an old established company."

One of the earliest writers had this to say about engineers. The italics are ours.

"The duties devolving upon the engine-driver are very peculiar and important. It is not merely that he has to regulate the working of an elaborate and costly machine, and to remember as a general *maxim*, that accidents are to be avoided; but he has to be perfectly calm under circumstances always trying—to act with decision under exigencies which may arise at any moment—to discover expedients in unexpected difficulties—and, as an incentive to the discharge

of these duties, he has to remember, not only that valuable property is under his care, but that often very many lives are entrusted to him; while, should any inadvertency arise, his own would be the first to be sacrificed.

Thirty Miles an Hour!!!

"While the train rushes forward, whether on the brink of some lofty embankment—over the seemingly frail fabric of the wooden bridge—beneath the earthy walls of the cutting, or within the bosom of the embankment, there stands the driver with his assistant, and as the hand of the former rests on the governor of the engine, he regulates the agency by which he is borne along.

"When we are seated by the rosy Christmas fire, and hear the sleet rattling against the window, or when the freezing blast howls, eager for entrance round the dwelling in which the family group is collected, we sometimes think of the hardy sailor, who rides the stormy ocean; but the railway engine-driver is often forgotten.

"Yet, his position is truly remarkable. Even on a bright sunshiny day, and at a moderate speed, the work is not for those who have very delicate nerves. The writer has tried it, and found *thirty miles an hour* to be *no despicable rate of travel*; for as he rushed on he began in some measure to realize the statement of the sailor, who affirmed that he was once in a gale of wind, in which it blew so strongly that a man who happened to yawn with his face to windward was obliged to turn round to leeward before he could close his jaws.

Best View from Tender.

"The writer ascertained also, that merely standing on the engine was not an easy position, and required some practise to be habituated to it; and hence, on more than one occasion, a seat on a chest on the *top of the tender* has been found to be preferable, while from the summits of embankments it afforded an admirable opportunity of *surveying the surrounding scenery*, from which the 'inhabitants' of carriages are debarred. But to see the engine-driver, when enduring

the cold that is produced in winter by evaporation from his drenched clothes, or, as the gale sweeps over the land in *one direction*, and he dashes through it at the rate of thirty miles an hour in the *other*, is to witness a strange struggle.

"Yet on he goes—the fearful responsibility under which he is placed keeping his attention undiminished, whether by day or amid the blackness of a wintry night—rushing down steep gradients, backed by perhaps thirty passenger-carriages, each weighing, on an average, *five tons and a half*—skimming along the summits of the loftiest embankments, and on the edge of precipices, at the foot of which roll the broad and heaving billows of the ocean—or penetrating tunnels, whose darkness can scarcely be distinguished from the impenetrable gloom by which he is elsewhere surrounded—and searching with straining eye-ball for the signal that tells him he may proceed, or the gleaming blood-red light that forewarns him instantly to stay his course under peril of immediate and utter destruction.

Without Embarrassment.

"If an engine could go, *without any embarrassment*, through the *fourteen-inch wall* of a Camden engine-depot, as has been twice the case; if, in an ordinary accident happening to a luggage-train near Loughborough, the wagons overrode each other till the uppermost one was piled forty feet above the rails; if a train often has a momentum equal to that of a cannon-ball flying through the air, of some ten or twenty tons' weight; then a train like that described would pass through a row of houses, if placed in its way, like a musket-ball through a keg of butter; while, if directed by any accident against solid rock, such as is sometimes to be seen at the entrance of a tunnel, the result would be too fearful to conjecture. But we need entertain no morbid anticipation of such catastrophes."

Our forefathers saw wonderful things. But what can equal the notice posted in a Maine station in 1838, stating the "Boston Express would depart at two o'clock in the afternoon, *weather permitting!*"



SCALES THAT WEIGHED NOT.

BY SUMNER LUCAS.

**A Story of a Million Dollars, a Coffin,
a Red-Headed Lawyer, and a Thief.**

IT was raining that night in Chicago when an automobile rolled up to the station a few moments before train time and three men alighted and hurried to the express-car.

All wore long rain-proof coats buttoned tight. They had pulled down their hat brims to keep the driving drops out of their faces. One man walked rapidly ahead carrying a suit-case, and close behind him came the other two with their hands in their pockets on large-caliber pistols.

In the suit-case was \$1,000,000 in cash for a bank in a certain Western city.

That bank needed the money in a hurry—needed it desperately—for a line of frantic depositors, three blocks long, had besieged its doors for three days crying for their money.

The money was taken to the express-car and locked in the safe by the messenger, Jim Harrison. He did not know what was in the suit-case, and the three men did not think it necessary to tell him. They merely told him to lock it in the safe, and then handed him a ten dollar-bill on general principles.

Then they betook themselves to the sleeper. Soon after the train pulled out, they turned in for the night.

No one but the bank officials in Chicago and the three men in the sleeper knew what was in the suit-case, so this method of carrying money was thought by them to be the best way and the safest.

In the safe were also several shipments of currency, one in particular for \$50,000 that another bank in the same town had ordered by telegraph as a precautionary measure. It had given the widest possible publicity to this shipment.

As the automobile pulled away from the station an undertaker's black wagon drove up hurriedly, its wet sides shining in the electric lights.

The burden taken from that wagon caused men to raise their hats even in the pouring rain. It was a coffin in a wooden box, consigned to St. Louis. It was placed in the same baggage-express car.

Accompanying the body was J. C. Jackson, a wealthy Chicago grain broker.

As Mr. Jackson entered the sleeper, he shook hands with two of the men who were the custodians of the money. The men said nothing—they were friends in a way—and all Chicago knew of the death two days before of Mr. Jackson's mother, and also knew that he was taking her body to St. Louis to place it in the family vault.

The train pulled out through the wet dismal night and silence brooded along the rails except for the jar and jolt and the occasional whistle of the engine which sounded into the very heart of the sleepless men back in the sleeper.

At daylight the Western city where the bank was located, showed through the dripping car windows and the three bankers, Cashier Morrison, and Mead and Smith of the Chicago bank, left the train and went forward to the express car.

Then came a thunder shock. The suit case containing \$1,000,000 was gone! Gone also was all the other currency in the safe. Gone also was the messenger. There was nothing in the car but ordinary express matter, baggage, and the lone coffin in its wooden box.

This, in a nut-shell, is what Ruggles had to work on when the case was laid before him an hour later by the three bankers.

Mr. Jackson went on to St. Louis and

placed the coffin, now taken from the wooden box, in the vaults of the family undertaker until the funeral, which would take place the next day at three o'clock.

Before Mr. Jackson left the undertaker's parlors, he took one fleeting glance at the cold gray face under its waves of white hair through the glass of the coffin.

"That fool messenger has tried to get away with that money. He is an idiot. He will be caught before night, but how about the bank, meanwhile? What a fool! What a fool!" said Cashier Morrison, excitedly, while Ruggles, one of the sharpest young lawyers in Missouri, scratched his wiry red hair and twisted his long thin legs.

"There is nothing to be done till we get the messenger," he said quietly. "I think it will come out all right, probably before noon. Don't worry."

"Don't worry, man! That's very easy for you to say! It is not your money!" hotly replied the cashier, while the other two stood dumb and hopeless.

The loss was on Morrison, and it was little of their affair as they had come along merely as confidential guards. Still they were eager, also, to see the thief caught!

"No. It's not my money. You are quite right," said Ruggles. "But I happen to have every cent I have on earth in your bank and if it fails I will be financially ruined. So we are in the same boat.

"Hallo, my boy! What news?" he added, as a messenger handed Morrison a telegram.

Morrison read it at a glance, then yelled: "They've got him! They've got him! Caught him in his own home right here in town. Hurry! Let's get to police headquarters. It is only six o'clock and we have four hours yet till the bank opens!" The four men, Morrison, Mead, Smith and Ruggles, went to police headquarters. Here they found the messenger, Jim Harrison, wild-eyed and dazed, shivering with fright.

Morrison would have leaped upon him with clutching fingers but for the restraining hand of the chief of police.

"Give me that money! Give me that money! Give me that money!" gasped Morrison as he struggled with the chief and glared at the shrinking messenger.

"All of you please leave the room for a moment," said Ruggles quietly. The chief insisted, and Ruggles and the messenger were alone.

"How about it, my boy?" asked Ruggles.

"Have a cigar? Oh, yes. Better take one. That's right. Now tell me all about it."

Messenger Harrison looked at Ruggles for several moments like a frightened girl, then calmed down as Ruggles continued to smoke slowly and to look out the window.

"There—there is—nothing to tell," Harrison ventured in a choking voice. "I—I made—I made my run as usual; and when we were just pulling in here, I saw that the money was gone, also that suit-case those men gave me—"

"What was in it?" asked Ruggles, casually.

"I—I don't know. I was talking about the money. That is gone. It was there only a little while before. So I don't remember much clearly after that. I know I unfastened the door and jumped out as we slowed up; and I remember being home; then they came and got me," halted the messenger.

"You unfastened the door of the car? Was the money there at your last stop?" questioned Ruggles, easily.

"Yes. It was all there. I looked to see after we pulled out from the last stop and everything was all right. There was no one else in the car. That is what frightened me so. Nobody but a—a—gh—ghost could have done it—you know—oh!" the messenger collapsed in a faint.

It took the police surgeon half an hour to bring Morrison out of his faint.

"The unhung thief! He'll be lynched when the news gets out!" raged Cashier Morrison.

"The news won't get out. You keep still if you hope to get that money back. Not a whisper, remember, to any one. That boy did not take it. He is telling the truth," said Ruggles, then he related to the others what the messenger had told him. Morrison at first scoffed angrily, but as the others seemed doubtful, he slowly quieted down and assumed a puzzled expression.

"If you'll leave this matter to me," said Ruggles, "I'll get the money and the thief, but just when I cannot say. You gentlemen attend to raising more money for the bank. You have three hours yet and there is a good machine at the door that can do seventy miles an hour. One hundred thousand dollars will hold off the run to-day if you pay out slowly from one cage, and meanwhile you can get more money from Chicago."

Then Ruggles went to breakfast while

the other three acted on his suggestion about raising the money at a nearby city to tide over the day. Eventually the bank was saved. About noon that day, the run suddenly melted away. The messenger was kept locked up under the care of three physicians, nobody was allowed to see him save Ruggles—and Ruggles did not go near him.

That morning about two hours later, Ruggles took a small suction carpet sweeper and went in an automobile to the yards where the express car was side-tracked.

The contents had been transferred to another car, as the car always ended its western run, making the return run from that point to Chicago.

Ruggles, with his own hands, carefully swept the floor, the inside of the safe, and everything else in the car. Then he placed these sweepings in a bottle which he sealed and labeled.

This done, he picked up a part of a plug of chewing tobacco, looked at it for a minute, smiled, carefully wrapped it in his handkerchief, put it in his pocket, and returned to his office.

On the way he stopped at Harrison's home and after a search of the messenger's room, he took a sheet off the bed, cut a hole in it the size of his two hands, and used the bit of cloth to wrap up several pieces of dried chewing gum he found in the waste paper basket.

Mrs. Harrison, the messenger's young wife was too worried over her husband's apparent trouble to notice Ruggles's absent-minded way of getting a piece of cloth in which to wrap the gum when he might have used a piece of paper just as well.

However, Ruggles did see the messenger once more that day. He called about noon to ask about his health and to bring him some fruit, a few cigars and some chewing gum.

"Thank you," murmured Harrison, "I don't use tobacco. But I'll take the gum."

Ruggles stalked from the police station in a brown study. Then he turned back and again questioned Harrison:

"Did you for a single moment leave the safe between the last stop and the stop here?" he asked.

"Why—er—no. Yes, I did, too. I was in the wash-room for, perhaps, ten minutes getting cleaned up as we were running in," the messenger remembered.

"That boy is telling the truth," muttered

Ruggles to himself. "The thief was in that coffin. I'm going to St. Louis." Ruggles did go to St. Louis. He called on Mr. Jackson and delicately made the request to see that the body in the coffin was really a corpse. Mr. Jackson was inclined to be indignant, but a natural worry led him to accompany Ruggles to the undertaker. There they looked at the thin gray face under the white hair of Mr. Jackson's dead mother.

The dead was left alone in the undertaker's room with other silent dead, and Ruggles left St. Louis sadly puzzled.

He returned to his home city, and was sitting moodily in his office by nightfall.

"Let's see," muttered Ruggles; time after time, "perhaps Morrison and the messenger stood in with each other and are working a game. I don't like the excessive way Morrison has of wanting to caress the messenger every time he sees him, by trying to choke him to death. Looks a bit over done."

"Then, too, how do I know if there was a million in that suit case? Have only the word of three men for it, and they might steal it between them, with the messenger's aid. But there is the other \$50,000 package. That is gone also."

"Harrison says he is sure the car was empty, except for himself, at the last stop; that the doors were fastened tight from the inside till he himself undid them to get out before the train stopped as it pulled in here."

"Jackson and his dead mother are above suspicion, for I've seen the old lady's face myself. Well, it will all come out in the wash, for it is a scientific impossibility to maintain a lie indefinitely, either verbal or acted." Then Ruggles went to sleep.

The next day he took the train for Chicago. With the aid of the police and liberal use of tips he secured a record of all the jewelry, fur, and automobile sales for that day—and for every day to come until he was done with such information. At two o'clock that day he received a telegram from the railroad authorities saying that three pieces of hand-baggage were also missing from the express-baggage car. The owners had presented checks for them, but the baggage was not in sight.

Again that night Ruggles sat long lost in thought. Finally he shook his red head, and went to bed. Next morning, on looking over the paper, he read that the funeral of Mrs. Jackson had been postponed for two days because the ship on which her daugh-

ter was expected from Europe had been delayed one day in reaching New York because of an accident to the engines.

Then he took up the list of the sales—telephoned to the police as soon as made—and centered his attention on three in particular.

"Ten thousand dollars worth of diamonds, dark man, small, looks like Italian, speaks with accent. Seal skin cloak, seal-skin overcoat, silver gray fox muff, nine hundred and fifty dollars. Also small dark chap with an accent, and a woman with him this time. And what's this? French car, twelve thousand dollars, to the same chap! My dear sir, I'm sorry to annoy you but we'll have to find where you got all that money. Maybe you are all right—and maybe not. We'll see."

With a search warrant, Ruggles and three officers in plain clothes suddenly swooped down on the apartments of Mr. and Mrs. P. Jaun Romanda in one of the best of Chicago's hotels.

They found only quantities of expensive clothing, furs, new baggage and cigars.

However, Ruggles took with him the lower sheet from the bed. In the pocket of a sweater he found a small metal tobacco tag. From the piece of the plug he had found in the express car, the tag had been extracted. The find fitted the place exactly.

"I'd give a dollar for a look at that chap's teeth," Ruggles remarked to himself, but to the officers he said nothing. "A million is a whole lot of money, and if these fly cops know too much they may sell out to the other side."

Then he said to the officers, "There is nothing doing here. Let's go. Sort of a wild goose chase. Call it off and forget it."

Ruggles went straight to his hotel and was alone for two hours. At the end of that time, about two o'clock in the afternoon, he telegraphed to his home city to the chief of police:

Quietly search town and see if a small, dark Italian has been seen there since the robbery. Also locate his room and seal it tight till I get there. Keep Harrison alone.

RUGGLES.

Then he swore out a warrant for the arrest of one John Doe, alias P. Jaun Romanda. Within an hour that sputtering little gamecock and his wife, were in separate cells in Chicago police headquarters. Romanda, however, had the best lawyers that money could hire, and was soon free.

His freedom lasted five minutes only. He was rearrested by the United States officials as a European criminal who had no right in the United States. This charge held fast in spite of lawyers and ready money, yet Romanda demanded a hearing and promptly got it next day.

He demanded to know the evidence that connected him with the express robbery.

Ruggles laid it on the table in the shape of several pieces of cloth and some small bottles.

"If your honor, or any one whom your honor will appoint, will examine these pieces of cloth he will see on them scales from the human skin. I have here a microscope of ten thousand power. I also have a sample of the dust taken from the express car, from the room this man occupied in this city, from a room he occupied in the city where the robbery was discovered—when he was operating under a false name—and I have also a sample of the dust taken from the attic of the home of Mr. Jackson. The samples all show the same scales from human skin.

"Of course there are many other scales from other human skins, but the scales from this man Romanda's skin are in all the bottles and on all the pieces of cloth.

"We have looked up his record by cable, and we find that he is one of the cleverest convicts that ever escaped from an Italian prison. He is a cabinet-maker by trade, and the son of a wig-maker. He is small in person, you notice, and is highly educated in science.

"In his rooms I found this old sweater, which is the one he wore on the day of the robbery. There are shreds of black silk on it. These traces of silk you may see for yourself under the microscope, your honor. They are the same kind of silk that coffin makers use to line coffins. The coffin in which was supposed to be the body of Mrs. Jackson, really contained this criminal. It was his method to get into the express car."

"Your honor! I protest against any such nonsense being given in this court as evidence against my client, Mr. Romanda. It is utterly idiotic! A man could not live ten minutes in a coffin with the lid screwed down, and that coffin was inside a strong plank box with the top fastened down with screws! It is absurd, your honor!" thundered the lawyer for the Italian.

"How about that, Mr. Ruggles? The coffin was not disturbed apparently, and you

do not claim that this man had any accomplices, do you?" asked the judge.

"No, sir," answered Ruggles, calmly. "As I have said, this man is a cabinet-maker. We expect to show how he entered the house of Mr. Jackson the night before the body of the old lady was shipped, how he tampered with the clasps of the coffin so that even if the lid was screwed down tight it could be lifted from within, clamps, screws and all in one piece.

"We also expect to show how this man very cleverly bored holes in the outer box just where the screws would go that held down the lid, and how he inserted corks in these same holes, the corks being concealed by a thin shaving of wood glued down. In other words, when the coffin lid had been screwed down tight, and when the coffin had been put in the box, and the lid screwed down tight, both lids could be lifted off by a live person inside the coffin. And that is just what he did.

"The body of Mrs. Jackson never left Chicago, and we found it last night concealed in the attic of Mr. Jackson's home. The head was shaved, also the eyebrows and eyelashes, and a wax cast had been taken of the face and throat. We even found the brushes he used to paint his wax face.

"We have located the store where these were bought this week in this city. We have witnesses who recognize this Italian as the man who bought them. He was wearing this sweater at the time. Also, he was short of money during the past month he has been in Chicago, till three days ago. Since then, he suddenly has thousands to spend. We expect to prove—"

"Just a moment, please, Mr. Ruggles," interrupted Romanda's lawyer. "Can I and my client have a short private talk with you—with the court's permission, of course, your honor?"

The judge was willing. Ruggles, Romanda and his lawyer were taken to a private room.

Romanda confessed. He told where the suit case with its \$1,000,000 was hidden in a certain safety deposit vault in Chicago, and with it the package for \$50,000.

Some \$30,000 already spent for jewels, furs, and automobiles, which were returned to the dealers and the money regained from them, was not in the box, but all else was there and safe.

The Italian took a twenty-year sentence

for robbery in America rather than go back to Italy and face death for killing two prison guards.

"I hear about the fifty-thousand dollars," Romanda said during his confession. "I hear about the death of Mrs. Jackson and I hear they ship body in same car. I find that out. I plan to get in coffin and at right time get out and kill messenger, take fifty thousand dollars and jump off. I make entrance to Jackson house. I steal body in night and take it to attic. I shave head, make wax face, put on hair and dress. I fix coffin and box lids. I get inside with oxygen in metal case to breathe by, like coal miner. I put wax mask over my face. I breathe oxygen when lid is screwed down, but only for half an hour going to the train. I also have with me a small steel jack-screw to raise lids. I do so on train and watch messenger all night through crack under lid of coffin box. He go in wash-room. I get out of coffin, put in three pieces of baggage to give weight, arrange wax mask again and fasten down lids. Then I take suit case and money package. I know money in package, but have no time to see what is in suit-case—but I take it anyhow. I hide behind trunk."

"But how did you get out of the car?" Ruggles asked him.

"Messenger go from wash-room to safe. Look in. Go crazy. Look all around very quick. Look at coffin, open car door and jump off. I jump off too, in few minutes. Train is beginning to stop. I walk up street like any passenger, and take room in small hotel. Then come to Chicago. No hide. No one suspect me there. Look everywhere but under their nose," and Romanda laughed scornfully.

Then Ruggles sent this telegram:

Release Harrison. Money found.

RUGGLES.

In telling the story, Ruggles said:

"The scales from no two human skins are alike. The method I used was like following a fox that had stolen a chicken, I merely looked for feathers and fox hairs when the tracks failed to show. As soon as I had compared that sheet from Romanda's bed with the dust in the express car and safe, I knew I had the right man. The rest was merely a matter of detail. That man's fate balanced in scales too small for the unaided human eye to see, but the microscope made them clear."

The Spree of Old 7269.

BY E. C. HOPWOOD.

An Ohio Locomotive, with All Its Energy Behind Its Mighty Drivers and
No Hand to Hold It in Check, Careers on
a Mad Joy-Ride.



For all the adventures with wild engines that railroad men of the Middle West recall, there is none more thrilling than the runaway of the 7269. Cut loose from its passenger train in a collision at a crossover, its engineer and fireman hurled to the ground, the heavy locomotive ran for miles through the network of railway tracks in the heart of Youngstown, imperilling lives and property, until it was halted by a switch-engine that inadvertently happened to be in its way.

It was a few moments before 7.30 o'clock at night when the first of the series of remarkable accidents occurred. West-bound Pennsylvania passenger-train No. 215 was waiting for its signal to proceed at what is known as the Crab Creek crossing of the Erie Railroad, a short distance east of the city. At this point the tracks of the Erie, the Pennsylvania and the B. and O. interlace, and there is no little confusion of tracks, switches and crossovers. An engineer named Cummings was in charge of the 7269 which was pulling the passenger-train.

No Time to Stop.

Cummings received his signal to go ahead and the heavy train moved down to the crossover. It was running perhaps fifteen miles an hour when it reached the Erie tracks.

Just as No. 215 was squarely on the crossover, a drag of cars was pushed out of the Bessemer yard of the Republic Steel Company. It struck the passenger-train

between engine and tender, cut the coupling and hurled Engineer Cummings and his fireman to the ground before they had time to stop their engine. The rest of the train came to a sudden standstill, but the great locomotive sped on down the track, with no man's hand to control it. The shock of the collision had thrown the throttle wide open, and with every turn of her drivers the old 7269 went faster and faster. There was no longer a heavy train to hold her back or the steady hand of Cummings to turn her power to service rather than destruction.

Into the City's Heart.

Scattered here and there in the yards, scores of men were at work and shifting engines were busy on the sidings. With hot coals glowing through the cracks in the fire-box, which had been broken by the force of the collision, and a cloud of sparks pouring from its stack, the runaway engine dashed through the yards. The men on the shifting engines could only cling to their seats and hope that the track was clear, while those on foot scattered wherever they could for safety.

Workers in the steel mills which line the right-of-way at that point heard the unfamiliar roar of the runaway and ran to the fences. They caught a glimpse of a swaying engine, obscured by a cloud of hissing steam and spouting fire, but even before they could make out what had happened, it was out of their range of vision and rushing straight into the heart of Youngstown.

Under the Market Street viaduct which

crosses the tracks the wild locomotive dashed at a terrific rate, witnesses of the engine's escapade estimating its speed at from seventy to ninety miles an hour, though it is probable that the lesser of these estimates is somewhat exaggerated.

When the engine passed beneath the viaduct, it was rocking violently and seemed to be in danger of jumping the track. It was here that the cab, loosened by the shock of the collision and the constant swaying, was shaken off and fell in a heap beside the track. As it did so it jerked back the whistle-cord and a shrill, uncanny scream rang out until the rope parted. A horse and buggy were on the Spring Common crossing and a crowded street-car had stopped but a few yards from the track, when, with a roar and a flash the runaway engine shot by. It missed the horse and buggy by a few inches, and it was a mere chance that the car was not on the crossing at the time.

A Freight Ahead.

The usual evening crowd had gathered at the Pennsylvania depot to await the arrival of train No. 215. About the time it was due they were amazed to see the 7269 bearing down upon them, breaking all running-rules of the Youngstown yards. The headlight was swaying from side to side, and steam hissed from the battered boiler, as the heavy locomotive took the curve at the station, her drivers biting into the rails and throwing out a steady stream of sparks.

Though it had not been many minutes since the passenger-train was cut in two at the Crab Creek crossing, messages were flashing all along the line for every one to look out for the runaway. One of these came to Telegraph Operator Ormsby in the B-Y tower at Mosier, in the outskirts of Youngstown and sent the color flying from his face. A freight-train had just passed the tower, and Ormsby knew that unless the wild locomotive was stopped the caboose of the freight-train would be tele-scoped and the crew would in all likelihood be killed or injured.

He ran from his office to a switch leading from the main line to a cinder dock along the river, and with all the speed at his command he threw the lever that would either dump 7269 into the river or hurl her from the track.

The runaway engine never reached the

switch, however. At the Austintown crossing a yard engine was leaving the upper Carnegie mills with a drag-of cars, similar to the one which had turned loose the 7269 on her wild career. The switchman was in his shanty watching for number 215 which was about due and had the semaphore set for the switch-engine to clear the crossing, when suddenly he saw the locomotive come staggering down the track.

If Engineer Cummings's hand had been at the throttle, the block would have served its purpose. To old 7269, however, it meant nothing. She shot past the block and the switch shanty and crashed into the switching engine with a roar that Operator Ormsby heard as he stood sweating at his switch at the B-Y tower.

The yard engine was struck in the side, hurled from the track a distance of forty feet and turned half around. The engineer and firemen were thrown from their engine by the shock, but neither was fatally hurt. Old 7269 jumped the track, righted herself, and, running a short distance along the ground, stopped within twenty feet of the yard engine she had wrecked.

The switchman had run out of his shanty and was not thirty yards away when the locomotives came together. Showers of gravel and fragments of iron fell all about him, and he was knocked down by a heavy piece of packing from one of the boilers, but escaped with but a few slight injuries.

Called for His Engine.

The crowd of men and boys who had been attracted by the news of the first accident, found Engineer Cummings cut and bleeding, running uncertainly down the track after his runaway locomotive. He was crazed for the moment and called continually for his engine. After he had been cared for at the hospital and his mind had cleared he said that he was conscious of but one thought after the crash at the Crab Creek crossing, and that was to get to his engine and stop her at any cost.

Thus the "Spree of Old 7269," as railroad men call it, terminated more fortunately than might have been expected. How it was possible for the great engine to make such a run through the maze of tracks and yards of a busy railway city without the sacrifice of a single human life, those who are familiar with the accident find it hard to explain.

THE AERIAL MAIL.

BY LYDIA M. DUNHAM O'NEIL.

Surly Simmons Declared that "Old Black Lulu" Was
the Only Thing on Wheels — and He Meant It.

BY and by, Surly, they won't need you nor your Lulu any more. They'll have air-ships to carry the mail an' express, an' then it's 'Old Black Lulu' to the scrap-shop an' you to Highland Park, Surly Simmons. An' I'll be sittin' in one o' them air-ships, all dressed up in goggles an' gloves an' things, steerin' the aerial mail an' lookin' tony. Aw, say now, Surly! That bolt like to clip me on the head. Don't be so reckless, throwin' things around like that. As I was sayin'—"

"Shut up, you thick-head, you! You couldn't steer a hand-car. An' there won't be no aerial mails in my time, cub. Let em run all they like when I'm under the sod—but not in my time."

But Surly was perceptibly disturbed by the idle banter to which he was being subjected daily. "Old Black Lulu," officially known as Engine 1448, was his darling. He abhorred electric locomotives, automobiles, gasoline launches, air-ships — anything and everything that was not run by steam-power.

"Old Black Lulu" was good enough for him, he said. "Old Black Lulu" and the "drag" of express and mail cars she carried were good enough for anybody.

Simmons did not know that the big trunk-line was already contemplating the building of a few air-ships for the purpose of conveying mail and express, or his mind would have been still more troubled. It was rumored that the Continental Air-ship Company was in the process of formation, and a continental air-ship line would mean more speedy delivery of mail and express, cheaper rates, and, therefore, considerable pecuniary loss to the railroad company. This threatened competition must be met and defeated;

so, while Simmons growled and swore, the railroad company planned and experimented.

By and by there came a young Englishman from the other side of the Atlantic, with a little money in his pocket and a grim determination to earn more — much more. By night he dreamed of cogs and wheels and screws and propellers and dynamos and ohms and volts and the wings of birds; by day he worked on these dreams and made them come true.

He didn't want to become famous; he wanted to marry. But he hadn't sufficient money, and no influential friends.

One day his dreams and his labor came to an end. That was the day that his small model of the Fenimore-Stokes air-ship was finished, tested, and found perfect.

Then Fate brought him into contact with Hendricks, the recently elected president of the Never-Mind-What Railroad Company. Hendricks wanted an air-ship, and Fenimore-Stokes wanted money. Each supplied the other's demand. Fenimore-Stokes sold his patent outright, and went home to Merrie England and his sweetheart.

Hendricks went his way, rejoicing in the knowledge that he had secured the means to combat the Continental Air-ship Company, which was still non-existent.

The Never-Mind-What Company built two large air-ships after the pattern of the Fenimore-Stokes model, and then hastened to build more, because, firstly, the Continental Air-ship line had become a reality; and, secondly, because of two daring mail and express robberies, which occurred only four or five weeks apart and defied solution.

Five mail-clerks and three express-messengers had been found dead in their cars, with their skulls crushed. A sixth mail-

clerk died without regaining consciousness, and a fourth express-messenger became so hopelessly insane that no clue could be obtained from his confused, incoherent speech.

All the most valuable express packages were missing, boxes broken open, and safes dynamited. In the mail-cars not one registered letter or parcel had been overlooked. In both instances, No. 3—drawn by "Old Black Lulu," with Surly Simmons at the throttle—was the train selected by the marauders. It hurt Simmons more than any one knew, but that did not mend matters.

The N.-M.-W. Company decided then to convey express and mail by means of the Fenimore-Stokes air-ships; so they broke a bottle of wine over the gray metal body of the first man-made bird and christened her the "Registered Mail." The second they named the "Chicago Express."

When he heard of it Surly Simmons broke two bottles of wine over "Lulu's" black nose, saying to her: "If you ain't worth two o' them flying-machines, then you can't run two miles in four minutes."

"Lulu" assuredly could run two miles in four minutes; but she sighed, nevertheless, and her iron heart throbbed convulsively.

The "Registered Mail" made three trial trips between her terminals—New York and a town half-way between the Eastern and Western coasts—safely and speedily. On the fourth day she started West with her first cargo of express and registered mail at the rate of three hundred miles an hour.

Only recently had the air-ship been utilized for practical business purposes, and heretofore two hundred miles an hour had been the maximum average speed attained. In the matter of speed, as well as safety and simplicity, the Fenimore-Stokes model had proven superior to all competitors. The aviator in charge of the "Registered Mail" boldly asserted that the ship was capable of twice the speed at which she was permitted to travel, but the N.-M.-W. Company was content with three hundred miles an hour—content to run two daily air-ships—the "Mail" and the "Chicago Express."

Side by side stood "Old Black Lulu" and the "Registered Mail." Side by side stood President Hendricks and Engineman Simmons. The old engineer was no longer surly, but sad. He spoke in a voice half choked with sobs:

"Your pa wouldn't 'a' done it, Mr. Hendricks. Your pa was a railroad man from 'way-back, an' he wouldn't 'a' done it. You

can fire me for that if you like. It's said, an' I ain't a goin' to take it back."

His intense sadness and resentment were almost comic. Hendricks laughed a little and tried to "jolly" the old engineer, but Simmons was in no mood for jesting.

He turned away, oiled the 1448, wiped her carefully with a handful of clean waste, and polished her as vigorously and unconcernedly as if the "Registered Mail" were no more than a summer shower.

But Hendricks heard him murmur once or twice: "They don't want us any more, 'Lulu.' They don't want us any more."

By and by Simmons walked over to the air-ship and examined her carefully. "No chance of a break-down, I s'pose?" he queried hopefully.

"No chance whatever," smilingly answered the aviator. Simmons looked about to see if there was anything with which he could tamper—a bolt he could loosen, or a screw he could remove, but there was nothing. Besides, he would have been detected.

"'lectricity, too," he growled. "Gasoline was bad enough, but 'lectricity!"

He turned away, and climbed into the cab of the 1448. He carried baggage and passenger-coaches for the first time in many years, and a feeling of shame stole over him as he gazed at "Old Black Lulu" and the string of cars behind her.

It had all come so "sudden-like." Only a few days ago, it seemed, air-ships were only toys at which he had laughed. Yet one of those toys had supplanted his "Lulu"—and there she stood, flaunting her triumph in his face—the blue-gray hulk three times as large as the largest car he had ever hauled and carrying his precious freight—his express parcels—his registered mail!

"Old Black Lulu's" days of glory were over—and so were his! Alas, how bitter!

No. 3 counted off the miles as she always had. "Old Black Lulu" puffed and whistled, and clicked, and pounded over the frogs, just as she always had—and, by and by, she started to sing a crazy little song of her own composing:

They don't—want me—any more—
They don't—want me—any more—

Simmons heard and understood—and answered:

"You're right, old girl. They don't want you any more. 'Lulu' to the scrap-shop, an' me to Highland Park."

In a short time they passed the ninetyeth mile-post, and Simmons began to look for the "Registered Mail." Somewhere along the line she would cross the N.-M.-W. tracks, headed directly West. She had no signals to heed as "Lulu" had, no curves to take, or hills to climb; she had it so easy—all plain sailing for her.

She would cross the N.-M.-W. tracks at the bridge, and sail away out of sight before No. 3 could—

"The devil!" The captain, or motor-man, or whatever he called himself, had told him there was no possible chance of a break-down, and yet—

The "Registered Mail" was wabbling—swaying—swinging! She was going to drop! Some one had blundered. Simmons was not the man to let a golden opportunity pass. Not he! Swiftly he calculated the distance to the point where the "Registered Mail" would fall, and swiftly he jerked the throttle open wide. Then he "hooked her up"—gave her "the short stroke," and she responded.

"Lulu! 'Lulu'!" he cried. "You go

to do it, old girl! Work hard now—hard, hard, hard! 'Lulu,' old girl, do your blamedest! Go it, 'Lulu'!"

The short stroke won the day for "Old Black Lulu."

Simmons leaned out of the window and watched the air-ship anxiously.

Down—down—down it dropped, and "Old Black Lulu" plowed into its shiny body just as it struck the bridge. They plunged into the river together—the "Registered Mail" and her crew, and "Old Black Lulu," with part of her "drag." Simmons still sat on the leather-cushioned seat, his greasy, sullen face transfigured by a triumphant smile.

"Old Black Lulu" was never sent to the scrap-shop. She lies there, at the river-bottom, still "hooked up," covered with mud and victory. And Surly Simmons never went to Highland Park, for he lived just long enough to say:

"They can run all the aerial mails they like when I'm under the sod—but—not in—my time. No. 'Lulu'—old girl—not—in our time."

PRESERVING TIES WITH CREOSOTE.

IT is interesting to note the increasing use of creosote for treating ties in this country. The process now largely in use is the Rueping method, commonly known as "empty cell impregnation," whereby it is expected that a uniform distribution of creosote can be made throughout the timber in small quantity, thereby greatly reducing the cost of the materials used, as compared with the full treatment with creosote, when the timber is allowed to take in as much of the material as it can hold. By this old method of creosoting, the timber is first subjected to a vacuum, so that, when the impregnating fluid is forced in, it remains there, filling the cells. By the Rueping process, the timber is first put under air pressure sufficient to fill all of the cells of the wood with air, and then the fluid is forced in at a higher pressure, so that, after this pressure is released, the expansive force of the air throughout the interior of the timber will expel part of the fluid from the cells, thereby leaving the walls of the cells merely painted with the creosote, so to speak, instead of filling the cell cavities. This is the theory of the process, and from the fact that a much smaller quantity of creosote is used than is the case when the ordinary process is worked, the facts seem to substantiate the theory.

In former years creosote was not seriously considered by railroad managements, owing to its high cost. Now, however, the Rueping creosote

process is widely used throughout the country, both East and West, and this progress has come about within the past six years. In 1904, at the St. Louis World's Fair, the government exhibited a tie-treating plant, and at that time the Rueping process was just beginning to come into notice. At that time about the only processes that were being worked extensively in this country for treating railroad ties were the zinc chloride and the zinc tannin methods. Now, however, most of the roads which were then treating with these cheaper methods have gone over to the use of the Rueping process.

As stated at the recent roadmaster's convention by an official of that road, the cost of treating inferior pine ties with creosote (Rueping) is twenty cents. The cost of zinc chloride and zinc tannin treatments in years past has ranged from eight to sixteen cents per tie, but usually ten to twelve cents. Of the zinc chloride processes the straight zinc chloride is logically applied to timber in dry climates, where there is but little water to leach out the salts, and the zinc chloride with glue and tannin should be used in climates where there is the usual amount of rainfall. Both of these processes, when properly applied, have given results well worth the while and have effected important economies in the consumption of tie timber to maintain track.—*Railway and Engineering Review.*

HELP FOR MEN WHO HELP THEMSELVES—NUMBER 36.

MINIMIZING THE COST OF OPERATION.

BY JOHN WALTERS.

Perplexing Problems That Have Been Solved by the American Railway Association, and Others That Are Taxing the Ingenuity of the Traffic Department.



AFTER all, the one supreme railroad problem out of which all other problems arise and for whose solution only the rest are studied, is, how can dividends be earned?

For the answer to this question the stockholders look to the traffic department. Other branches of the service by wise economy may save money, but only the traffic department earns money, or rather handles the receipts which the concerted efforts of all departments earn.

Naturally, the management bestows particular attention upon the traffic department. If comparisons are not too odious, it may be said that the ablest men are generally sought for this branch of service, and as the difficulties are generally proportioned to the prize, the problems with which the traffic men must grapple are at least as formidable as those which confront the experts in maintenance and operation.

As in the case of everything else connected with a railroad, the magnitude of traffic problems would make them difficult if nothing else did. There were in the United States on December 31, 1907, 1,985,137 freight-cars belonging to the railroads, but including the cars owned by other corporations, such as the refrigerator-cars owned by

the beef trust and the big brewers, the total was 2,083,976. The average daily earnings of each of these cars was \$2.05.

This was far from satisfactory to the railroads, and during car famines such a showing was still less satisfactory to the shippers. The great difficulty is to keep the cars moving. The railroads get a movement averaging from twelve miles per day per car on single-track lines handling low-class traffic, up to thirty-eight miles a day per car on roads having two to four tracks and handling a large proportion of high-class traffic. In other words, the railroads obtain but from one to three hours' service out of their entire car equipment in each twenty-four hours.

Freight-Car Movements.

The average mileage of all freight-cars in the United States for the year 1905 was 24.8 miles per car per day. In 1906 this was increased to 25.7 miles per car per day. In December, 1907, the average had dropped back to 23.9 miles per car per day. The world's record for freight movement is held by the Pennsylvania Railroad, which in the week ending September 28, 1907, handled 41,332 cars, and in twenty-four hours on September 29, 8,630 cars. On the latter

Series began in the August, 1907, Railroad Man's Magazine. Single copies, 10 cents.

date the movement was equivalent to sixty cars a minute passing a given point.

As an average of 150,000 cars a day are loaded in the country, an increase in movement of a single mile a day for each car would be equivalent to adding 80,000 to 100,000 new cars to the available equipment. That number of cars would cost approximately \$100,000,000. How to get this increased movement is a problem so important that the American Railway Association, composed of the higher executive officers of the railroads, has appointed a committee on car efficiency to study it.

How Cars Are Delayed.

One great trouble is that the average man to whom a car of freight is consigned feels that he has an inalienable right to use that car as a warehouse in which to store freight, until it suits his good pleasure to remove it, if it takes all summer. Theoretically the railroads protect themselves against abuses of this sort by charging demurrage when a car is not unloaded within a given time, but if in practise they attempt to collect demurrage the consignee protests that he is down-trodden and routes all his shipments over the competing road forever after.

On the other hand, if the railroads do not get their cars released by enforcing the demurrage rule, other shippers who are waiting to get those cars to load complain to the State railroad commission that the companies are playing favorites in the distribution of cars, and the result is more laws the following winter. From all of which it may be gathered that the committee on car efficiency has its work cut out for it.

However, the task of the committee on car efficiency is simple when compared with the heart-breaking problem which confronts the American Railway Association's special commission on the interchange of freight-cars. The magnitude of the question may be judged from the personnel of the commission. It was appointed in April, 1908. It consists of President James McCrea, of the Pennsylvania; President Lucius Tuttle, of the Boston and Maine; President W. W. Finley, of the Southern Railway; and President Howard Elliott, of the Northern Pacific.

Getting Back the Empties.

If no shipment ever went beyond the rails of the road on which it originated, the spe-

cial commission would never have been called into existence, but as car-loads and train-loads go to all sorts of places and often move over a number of railroads to reach their destinations, complications then arise.

No one but the railroad pays for the hauling of an empty car about the country at a cost close to that of moving a loaded one. Under these circumstances the line upon whose tracks the car is unloaded would like to have it reloaded with another cargo before sending it back home.

As an inducement to keep the empty car from waiting too long for a return load the railroads have agreed to charge each other fifty cents a day for a car that is kept away from its home road. If the per diem charge was too small, the little roads would find it more profitable to retain the cars of the larger lines for their own use and pay the per diem rate, but if it is too high the little roads are threatened with bankruptcy.

Some of them have found fifty cents a day a ruinous price in these days of low rates. In any event, the arrangement is unsatisfactory all around. The big roads want their cars, for they generally have use for them, and they don't care to pay the per diem charge for cars of another line when they have plenty of their own if they could only get them.

Creators of Traffic.

In April, 1907, only fifty-four per cent of the freight-cars in the United States were on the roads to which they belonged. This condition was so unsatisfactory that a special effort was made to get cars back home. By the following December, sixty-four per cent of the cars were on their home roads, but to accomplish this result an unnecessary and profitless movement equivalent to hauling one car nearly five thousand times around the earth at the equator was required.

It costs a lot of money to haul an empty car 117,287,407 miles, and the expense cannot be collected from shippers, but must be taken from funds that the railroads would prefer to devote to some other purpose, and all the great home movement of 1907 amounted to was practically an even exchange of cars.

None of these things, however, constitute the crowning grievance of the traffic department. Every railroad in the country has as one of its most valued employees an industrial commissioner, whose duty it is to

make ten car-loads of freight grow where there was only one before.

When he has accomplished this by persuading capitalists that fortunes are to be made in manufacturing along his line, and then locating them at points where they cannot ship over a competing line if they wanted to, besides giving the farmers in his territory post-graduate courses in their own business, it becomes the privilege of the general freight-agent to retain the traffic thus created if he can, and of the general passenger-agent to round up the passenger traffic that follows in its wake, if possible.

It costs a pretty penny to keep up this work of creating traffic, but it comes the nearest to being paid cheerfully of any money from which a railroad company parts.

Short Hauls That Cost Dearly.

New York's dray bill is \$35,000,000 a year, a large part of which is practically so much money thrown away. If the traffic manager could find some way to save part of this, his patrons would have just that much more money, time, and energy to devote to useful production, which in time would benefit the railroads. Another direct incentive to simplify traffic conditions in the metropolis is a little item of \$50,000,000 a year which represents the cost of lighterage and car-floats for the railroads.

In Chicago, where conditions are not nearly so inconvenient and wasteful as in New York, a freight-tunnel system thirty-four miles long was built under the wholesale district, at a cost of \$15,000,000, in which 30,000 tons of freight can be handled daily at an enormous saving.

In St. Louis the famous Cupples Station, a central station which meets the warehouse and shipping requirements of the city's great trade with the Southwest, saves \$4,000,000 a year. Instead of hauling freight to a score of widely separated freight-stations scattered through the most inaccessible portions of the city, all merchandise is sent to Cupples Station.

Here, in a series of buildings covering thirty acres, and well provided with spurs, switches, and hydraulic lifts, two thousand expert freight-handlers handle a business aggregating a hundred million dollars a year without any expense at all for cartage. Freight is unloaded from the car on trucks, which are run onto hydraulic elevators and shot up to the floor-space allotted to the con-

signee in wonderfully fast time. Each road has its scheduled hour to take away and deliver cars, and the shipments are assorted and handled by the station force to conform to this schedule.

Switching by Gravity.

Even after a car is loaded, it does not cease to cause trouble and expense, aside from its actual movement on the road. The problem of switching has been the subject of much learned discussion at recent railroad conventions.

Most big railroad yards have a hump nowadays which does by gravity what the switch-engine would otherwise have to do at a vast expenditure of time and fuel. The hump is nothing more nor less than a little artificial hill, from the summit of which the tracks lead down at a grade just steep enough to make a car run nicely to the farther end. Once a switch-engine gets a train on the hump, it need only give each cut the slightest of kicks, and the cars will then run by gravity wherever the switch-tender sends them.

This is fine as far as it goes, but the scheme isn't perfect. If the grade is steep enough to make a car run ten miles an hour by its own momentum, which it must do if the hump is to do its work economically, each cut must have a rider, who, by using the hand-brake, prevents it from running out at the farther end, or smashing draw-bars on other cars. The speed with which a train can be classified, therefore, is limited by the number of riders available and the zeal they display in getting back to the hump for fresh cuts.

Powder Magazines on Wheels.

A switchman will run when necessary; but when it comes to walking while on duty, he is no match for Dan O'Leary. So railroad officialdom is racking its brain for some scheme that will make him step lively. In the Lake Shore yard at Collinwood, Ohio, where a tremendous volume of traffic is handled, a trolley-car has been installed to carry the fifteen riders back to the hump. The car travels eighteen hundred feet, and so saves the work of three riders, or, say, six hundred dollars a month on both night and day tricks.

This is worth while, but still there is time lost waiting for the trolley-car. So the

New York Central will improve upon this plan by installing a moving sidewalk to carry riders back to the hump in its big Gardenville yard on the outskirts of Buffalo.

Of all the problems that any department of the railroad has been called upon to solve in recent years, that connected with the shipping of explosives is the most interesting. Perhaps it is just as well that nervous passengers do not know that an average of five thousand cars of the most dangerous and deadly explosives are in transit somewhere on the railroads of the United States every day in the year.

Accidents were frequent enough to worry railroad executive officers, but did not spur them to action until May 11, 1905. On that day a freight-train entering the outskirts of Harrisburg was flagged. The engineer applied the air-brakes so vigorously that the long train buckled, throwing two cars from the middle of the train onto the west-bound passenger tracks. A passenger-train which came along a moment later dashed into the two cars.

They were loaded with dynamite, and in the explosion that followed twenty-three persons were killed and a large number injured.

Warning the Shippers.

As a result of this accident, the Pennsylvania Railroad undertook to safeguard the shipment of explosives over its own lines. After two years it became evident that the work, to be successful, would have to be national in scope, so the subject was referred to the American Railway Association for action.

The result was the organization of the bureau of explosives of the American Railway Association, with Major B. W. Dunn, of the United States army, in charge. Fourteen inspectors were appointed, and the work of educating manufacturers of explosives in the rudiments of their own business, and of training the one hundred and sixty thousand railroad men whose duties include the handling of explosives to look out for cars in bad order, was begun.

At first the manufacturers refused to have anything to do with the bureau of explosives, or to allow its inspectors on their premises, on the ground that the bureau was organized in the interest of the powder trust for the purpose of driving the smaller fry out of business.

So Major Dunn concentrated his work of

inspection on cars in transit, and set systematically about gaining the confidence of the manufacturers. The conditions discovered were almost incredible. Of 178 cars of explosives in transit, 99 were found to be in a condition that would permit accident, and 127 failed to comply with proper regulations in some respect.

Some Terrifying Discoveries.

For instance, one car containing over two tons of dynamite had cracks in the sides, roofs, and ends through which sparks could enter, and the packages were loose, so that they could and did slip and slide about the floor. Besides this, some loose iron pipe and wire cable were loaded in the same car. When two pieces of iron smeared with dynamite are knocked together, something is going to happen.

Another car, containing 6,850 pounds of dynamite, had loose boards and cracks and doors ajar for the admission of sparks. Nails and bolts projected from the floor, the king-bolt sticking up half an inch. The boxes of dynamite were loose and sliding about, while one box had its lid knocked off and the dynamite exposed. To make it more interesting, blasting-caps and fuse were loaded with the dynamite. In still another car, containing 10,000 pounds of black powder, some kegs were broken and the powder was strewn over the floor, while big cracks in the ends and over the doors gave free access to stray sparks, of which there is always a bountiful supply in the neighborhood of a locomotive in action.

When diplomacy at last gained entrance for Major Dunn's inspectors to the factories, it was found that 47 out of 141 failed to comply with important regulations, while 119 of the 583 magazines examined were found to have dirty floors stained with nitro-glycerin, and in fine condition for an explosion.

In 59 of them, packages of high explosives were found in a leaking and dangerous condition.

At last, on January 17, 1908, Major Dunn succeeded in getting the manufacturers to attend a conference.

An Object Lesson.

As soon as he got them together the major marched them all down to a railroad yard, where cars with dummy packages represent-

ing dynamite were knocked about by the switch-engine just as cars handled in the ordinary routine of business. After an hour or so of this the cars were opened, and the manufacturers were invited to examine the condition of their contents.

What they saw made them quite willing to comply with the rules that had been formulated for loading and staying packages of explosives and other regulations conducive to safety.

Yet, in spite of the work of Major Dunn's staff, there were 17 accidents to explosives in transit in 1907, which killed 31 persons and injured 78, and caused the loss of \$544,161 worth of property. In the same period there were 66 accidents in factories for the manufacture of explosives, in which 101 persons

were killed, 62 injured, and property worth \$279,400 destroyed.

There can be no doubt, in view of the revelations made by the inspectors of the bureau, that many, if not most, of those accidents, both in factories and in transit, could have been prevented by the observance of reasonable precautions. In view of the fact that their own property, as well as human life, was in danger, it is certainly amazing that all possible care was not exercised without the intervention of the railroads.

Yet manufacturers of explosives are only one of the many classes of shippers with which a railroad has to deal.

Altogether, it would appear safe to venture the assertion that railroad executives have something to think about besides pay-day.

When the Despatcher Forgot!

BY F. ELWOOD.

A Collision That Was Caused by the Man at the Key Taking a Long Chance, and His Consequent Failure To Rectify His Breach of the Rules.



WO smashed mogul engines, a dozen or more freight-cars damaged, traffic seriously delayed, one employee killed and five others injured—this was the result of a violation of the company's rules by the despatcher failing to "transmit train orders simultaneously to all concerned."

Conductor Harry Kiminsky was in charge of the fifth section of train No. 19, of which I was the engineer, on the south and north division of the Louisville and Nashville Railroad, running between Birmingham and Montgomery, Alabama. Leaving the former city that night we were given our running orders as was usual, together with instructions that "extra 872 north had the right-of-track to Longview over 5th No. 19, engine 861." With others, this order was issued some time before our departure.

North of Longview there was a very heavy grade, and as the company had just

finished a new route, circling the mountain, special orders had been issued stating that the new route was to be opened as the south-bound main line at ten-thirty o'clock that night. Up to that hour, no train was permitted to use the new track without written instruction from proper authority.

As we had no such instructions, arriving at Suluria, the north end of the new grade, we kept to the old main line, leaving that station at 10.05. While the 861 was laboring with her tonnage and slowly rounding a sharp curve at the edge of a high cliff, I was horrified to see a headlight flash suddenly into view.

It was soon so close that I could easily read the figures 872 on the number plate of the fast-approaching locomotive. I yelled at my fireman to look out, but there was no time for either of us to jump, and the engines came together head on with terrific force.

During the short period after seeing the

opposing engine, my mind moved very rapidly. I tried to figure by what right the extra was there and whose fault it was. I thought of my home, of my wife and family, and wondered what in Heaven's name would be my fate.

All I remember when the crash came was a severe blow on the head that threw me into a daze. I could feel the hot, escaping steam, though for the time being I was unable to realize my perilous condition.

In a few minutes, however, I regained full consciousness, to find that I was pinned in the corner of the cab, bruised and bleeding, and apparently unable to escape, as there was no room to open the front cab-window, the tank being jammed tight against the boiler-head.

My first move was to stop the escaping steam. By its peculiar odor I knew that some connection to the lubricator was broken, and was fortunate enough to locate it in the dark and shut it off. This remedied, I crawled up on top of the boiler so as to make room for opening the front cab-window.

By this time my conductor reached the engine, and called up to find out whether the fireman and I were still alive. One look convinced me, however, that my unfortunate companion had been killed and was buried under the wreckage.

Tony Feagan, the engineer on the other engine, and his fireman had jumped, the former striking a large boulder and breaking a few of his ribs, while the fireman escaped with a few bruises. It was two months before I could resume my duties; Engineer Feagan was off much longer.

Our train had passed Suluria, and the operator had reported us by, when the despatcher called and asked him if 5th No. 19 was using the new track. Upon receiving the information that we were not he instructed the operator to go out and listen

and report at once if he heard the impact of the collision.

He immediately ordered out the wrecker, knowing that nothing short of a miracle could prevent an accident, as extra No. 872 had already passed Longview, having gotten orders to Suluria over 5th No. 19, the tissue reading, "5th No. 19 will use new main line from Suluria to Longview."

It developed during the examination as to the cause of the accident that the despatcher on duty, not being able to get the operator who had previously taken our running orders, and the one giving extra No. 872 rights to Longview, issued another order to extra 872 north conferring rights to Suluria over 5th No. 19, trusting that he would remember to have this last order added to our original orders when we called for them.

He took a chance, disregarding positive instructions, and issued the order to the extra, forgetting to have it added to our other orders when they were delivered to us.

At first there seemed to be a disposition to put the blame on the operator, and an effort was made to make him admit that he had been instructed to make this addition to our orders, but this he refused to do. He looked his questioners squarely in the face and said:

"This is a case of homicide in a way, and I am in no way responsible. I have nothing but my home, but I will sell it that I may raise funds, if necessary, to fight this case in court, rather than have the blame fixed on me. I never received any such order for 5th No. 19." These are his exact words, as nearly as I now recall them.

He was exonerated and put back to work shortly afterward, but the despatcher was dismissed from the service, it being decided that even though he sent the order, as he claimed he did, he had grossly violated positive rules by not transmitting simultaneously the order to all concerned.



The Rollicking Trolley-Riders.

BY JACK SILVERTON.

ALL the good stories of railroading are not necessarily confined to the big steam lines. Now and then we get some live ones from the electric-railway men who often have experiences quite as interesting as those of the fast passenger and freight trainmen. Their work is not so full of thrilling moments and deeds of daring as that of the regular railroad men, nevertheless it is livened at times by incidents that give one a sort of live-wire tickle.

Some Little Comedies of Street Railway Life in the West in Which the Unexpected Took the Leading Part and Fate Played Some Odd Pranks Upon Her Victims.



HARLEY CANNON worked for years as a brakeman for the Denver and Rio Grande Railroad—out of Denver—without a single mishap. Then came the day, up on one of the worst grades in the Rockies, when his freight left the track and turned handsprings all the way down into the valley.

While the freight was somersaulting down the mountain, Cannon found himself lying in the snow, so badly smashed up that wreckers had to carry him back to civilization.

When he recovered, he said to his wife: "I'm through braking. It's too hazardous a profession. I'm going to learn to be a motorman and get a job on a trolley line. Who ever heard of any electric railroader getting smashed up? No one ever gets hurt on a trolley line excepting the passengers who get off backward."

Soon after this declaration, Cannon heard that Salt Lake City wanted some new motormen. Forthwith, he bought two tickets to Salt Lake, and, with Mrs. Cannon, for the first time in his life, traveled on the D. and R. G., over the Rockies, as a passenger.

Upon their arrival in Salt Lake City, he went straight to the car-barn of the Utah Electric Railway Company, qualified as a

motorman, and was told to find a uniform and get on the job quick.

For a whole year Charley Cannon ran big suburban cars from the Rio Grande Depot out to Fort Douglas, and daily he gloated over the fact that now that he had stopped braking he couldn't possibly get smashed again.

Trouble on a Trolley-Car.

Then came that memorable night in November, 1908, when his car, on its way from Fort Douglas to the Rio Grande Depot, struck a down-grade where the motormen usually coasted at about thirty-five miles an hour. Cannon was going at the usual rate when the car suddenly hit a rock, leaped from the rails, and turned completely over, finishing its cavortings by landing on its back.

The forward platform of the car rested on one side of a small creek, while its rear platform lay on the other, thus forming a bridge. Within, twenty-three passengers, lying in a mass on the ceiling of the car, squirmed and struggled and wiped their feet on one another, all bent upon getting out of the wreck at the same time. Not a single one of the whole twenty-three escaped without injury of some kind.

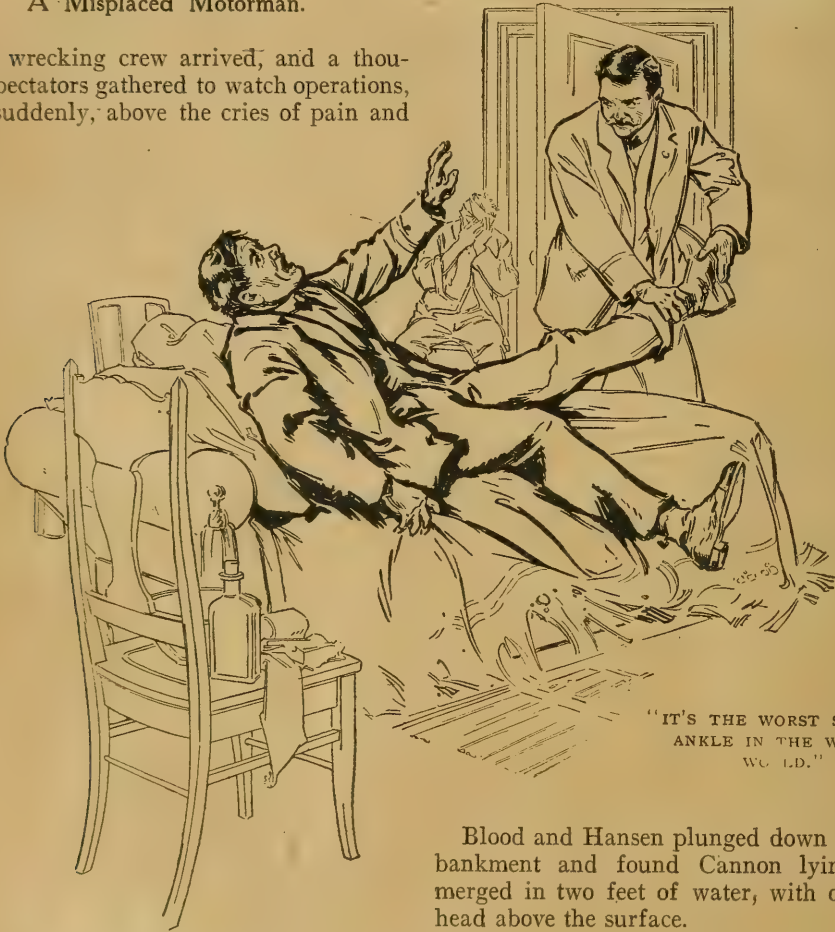
Conductor Hansen found himself lying under five men who had been standing on the rear platform, suffering from a badly bruised leg. He allowed the five men to walk on his face until they succeeded in getting off the ceiling of the platform. Then he arose and began the heroic work of assisting swearing men and praying women out of the car.

A Misplaced Motorman.

The wrecking crew arrived, and a thousand spectators gathered to watch operations, when suddenly, above the cries of pain and

Blood thereupon looked at Hansen, and the trolley conductor looked at the steam railroader. Then, in unison, they both cried: "It's Charley Cannon! Yes, the women are all out."

"Well, then," yelled Charley, from beneath the car, "you fellows come down and get me. I'm tired of lying in this ice-cold bath."



"IT'S THE WORST SPRAINED ANKLE IN THE WHOLE WORLD."

Blood and Hansen plunged down the embankment and found Cannon lying submerged in two feet of water, with only his head above the surface.

the screams of the lady passengers, a penetrating voice was heard crying: "Where's the motorman? Where's Charley Cannon?"

The speaker was William Blood, a railroad conductor, with a run out of Salt Lake on the Salt Lake, Los Angeles and San Pedro Railroad, who was an old-time comrade of Charley's. In answer to Blood's question, a voice from the darkness down in the bed of the creek, directly under the car, cried:

"Have you got all the women out?"

Rescued by Conductors.

"Are you hurt?" the conductors asked.

"I can't move by my lonesome," the motorman replied.

So the two conductors waded into the stream, lifted Cannon out of the water, and dragged him up the bank. Four volunteers then carried him over to Conductor Blood's house, which happened to be near the scene of the accident.

Two or three other victims had already

been taken there before Cannon arrived, turning the house into a temporary hospital.

While the injured motorman lay awaiting the coming of an ambulance, Conductor Blood came in.

"Where are you hurt, old man?" he asked.

"There," answered Charlie, pointing to his left foot. "It's the worst sprained ankle in the whole world."

What the Surgeon Found.

Blood took hold of his friend's left ankle and looked mightily puzzled. He then squeezed the ankle good and hard, saying, with a humorous twinkle in his eye: "Does this hurt you, Charlie?"

"Hurt?" answered Charlie. "It's perfect agony?"

Just then the ambulance arrived. Cannon was put into it and was soon on his way to the hospital, with his feet close to the seat on which the medical student, on guard at the rear of the vehicle, was sitting.

"You say you sprained your left ankle?" the student asked. "Look here, now," he added. "Does this give you pain?" and he squeezed the motorman's left ankle as vigorously as Blood had done.

"Pain?" yelled Cannon. "Why, I'm nearly fainting from the torture of it." Whereupon the medical student's smile grew until he couldn't help laughing out loud.

At the hospital Cannon was placed on a cot, and soon the surgeon came and made an examination of his injury.

"It's my left foot, doctor," he said. "That left ankle is sprained something terrible. I'm sufferin' from that sprain worse'n I did in that freight wreck of mine in the Rockies on the D. and R. G."

The surgeon looked at him sharply, and then he, too, smiled and proceeded to bind up the other foot.

Mixed in His Understanding.

The next day Conductor Blood of the Salt Lake-Los Angeles Route, and Conductor Hansen of the wrecked trolley-car, happened to meet at the hospital, whither they had come to inquire into the condition of the victims of the disaster of the previous night.

The surgeon who had dressed Charlie Cannon's foot greeted the visitors by saying:

"Queer case, that of Motorman Cannon.

I've seen cases like it before, but never one so pronounced as his. He imagined he suffered from a sprain in the left ankle, though such a thing was absolutely impossible."

"Yes," put in Blood. "I made the discovery myself while Charlie lay in my house last night waiting for your ambulance."

"Why, whatever do you mean?" asked the electric railroader. "Why do you say it was impossible for Charlie to suffer from a sprain in his left ankle?"

"Because he hasn't any left ankle at all," replied Blood.

"Quit your kiddin'," expostulated the trolley conductor.

"You mean to say you've been trolleying with Charlie Cannon for a whole year, Hansen, and didn't know he hadn't any left ankle?" retorted Conductor Blood. "Why, after Charlie's smash-up in that D. and R. G. accident over in Colorado, his left leg was amputated below the knee. His left ankle is made of cork."

From Trolleyman to Tourist.

One morning in May, 1907, two attachés of the Kansas City Union Station, both of them sufficiently prominent to have their names emblazoned on certain doors not far from the concourse, were standing by a slot-machine enjoying an after-breakfast smoke, when Charlie Kelley came up.

"Making my last run to-day, gents," he said. "I'm leaving here to-morrow for New York to sail for Europe."

The officials were dumfounded.

Kelley wore a uniform so faded that one was in doubt as to whether its original color was blue or green. On his cap was a sign advertising the fact that he was conductor for the street-car company of Kansas City, his particular run being on the line that hauled passengers to and from the union station.

"Break it to us easy, Charlie," said one of the station-men. "You mean to tell us that you, a man who hasn't spent a cent for anything except necessities for so long as we can remember, are going to blow yourself to a European trip?"

"Yep," answered Kelley, "and my wife is going with me."

"You must have a pot of money," said the other station-man.

"Ain't sayin' how much," replied Charlie,

"but it's enough to see the old country first-class, that's sure."

To appreciate the romance of the trolley rails in which Charlie Kelley played the hero, we must go back to the day in May, 1901, when he first pulled the bell and rang up fares on a Fifth Street car. That morning, as he passed a certain house on Fifth Street, he saw a young girl standing in the front door.

How Kelly Won His Bride.

Thinking that she wished to catch his car, Charlie beckoned to her. She waved a white hand in response, motioning him not to stop.

The next morning he saw that same girl standing by her front gate. This time Charlie smiled. The girl returned the smile, and Charlie caught a glimpse of a dimple that aroused in him a wondrous admiration for its owner.

The following morning, when Charlie's car approached the house, the girl stood by the curb and beckoned to the motorman to stop. He helped her aboard, his heart beating at a dangerous pace and the blood suffusing his face to such a degree that he seemed threatened with apoplexy.

Charlie finally learned that his divinity's name was Nina White, and after she had ridden on his car about six times a week for two weeks he mustered up enough courage to ask if he might call at her house on his evening off. Then, on the last day of the merry month of May, Nina White became Mrs. Charles Kelley.

The honeymoon was still shining, when one day Charlie asked his wife what she would like more than anything else in the world.

A Street-Car Strategist.

"A trip to Europe like our neighbors next door have just made," she replied.

"How much did it cost them?" asked Charlie curiously.

"Three thousand dollars."

He thought a moment, and then cried: "Nina, you shall have that trip to Europe."

Mrs. Kelley protested. She said she had mentioned it only in fun, and declared that for them to raise three thousand dollars was as absolutely impossible as for her to raise the roof of their house with her bare hands. But Charlie insisted there was no such word in the dictionary as "impossible," and thereupon outlined a plan by which they could

quickly accumulate the necessary three thousand dollars.

"We'll save it," he said. "From this minute we'll begin saving every penny."

Soon after that, Charlie's street-car comrades noticed that he no longer smoked cigars. He seemed terribly fond, now, of a corn-cob pipe. Also, they noticed that he ceased patronizing the soda-water fountain and the moving-picture show.

Months, years passed, and Charlie never would get a new uniform till the old one had been mended and patched to the limit of the cloth's endurance. Meantime, living the simplest sort of a life, he became the most robust and healthy street-railway employee in all Kansas City. His wife also grew rosier, and they both wore smiles that a Kansas cyclone couldn't tear off.

It was on the last day of May, 1907, when he had been married just six years, that Charlie Kelley came to the two station-men at the union station and for the first time revealed the secret of his life, namely, that he and his wife were going to Europe.

Back from Abroad.

Six months passed. Then, suddenly, Charlie reappeared to the station men at the union station, wearing the same old faded uniform and smoking the same corn-cob.

"Hallo, Mr. Rockefeller," cried one of the station-men. "You're back, are you? Tell us all about it."

Charlie told them that all he saw in Ireland was rain, and that in Paris he ate ice-cream three times a day, and added: "I'm going right up to the car-barn now and ask for my old run."

"What! A rich man like you going to conduct a plebeian street-car?"

"Yep. I've got to. I'm broke. Spent in six months all that I saved in six years and am darned glad of it. So's my wife. We bought something with our money that no one can ever take away from us."

When the Foreman Got Busy.

One bitter cold night in February, 1910, at the Kansas City, Kansas, street-car barn, Foreman Hovey was hugging the red-hot stove when his telephone bell began ringing so wildly and so alarmingly that Hovey upset his chair in springing up to heed the call.

"Hallo, Mr. Hovey!" said a breathless

voice at the other end of the wire. "This is Arthur Haskell, motorman on car four-nine. My conductor is lying on the floor of the car, dead to the world. What shall I do?"

"Where are you?" asked the barn foreman.

"Near the Missouri Pacific Railroad Station."

"Wait right there, Haskell. I'll send some one to take the dead one off your hands."

Foreman Hovey then asked central for a number.

"That you, Coroner Davis?" he said, when the connection had been made. "Go right down to the Missouri Pacific Station. A conductor of ours has dropped dead. You'll find him lying on the floor of car four-nine."

Hovey then called another number, and cried: "Is that Daniels' undertaker shop? Hallo, Mr. Daniels! One of our conductors is lying dead in his car at the Missouri Pacific Station. Go right over with your dead wagon, please."

Fifteen minutes later two vehicles were rushing at fire-engine speed toward the Missouri Pacific Station. One was a buggy with a galloping horse; the other, a long, black, sinister-looking wagon, with its two horses cantering like mad. Both vehicles dashed past the Mop Station and on down the road, beside a spur track, till they came to a lone trolley-car.

Out of the car, as the two vehicles came to a halt beside it, stepped a man who shivered pitifully as he cried between chattering teeth:

"Who's here?"

"I'm Coroner Davis," said the man who had jumped out of the buggy. "What happened to him? Apoplexy? Heart-failure?"

"I'm Daniels, of Daniels & Comfort, the undertakers," announced the man who had jumped down from the long, black vehicle. "This is our dead wagon," he added. "With the coroner's permission, I'll take the dead conductor off your hands."

As Motorman Haskell listened to these words he stopped shivering, his teeth stopped chattering, his eyes bulged, and he gasped: "Who sent you here?"

"Hovey, the foreman at the car-barn."

"Well, then, you two go right home out



SHE WAVED IN RESPONSE,
MOTIONING HIM NOT
TO STOP.



"THANK YOU, MADAM," SAID THE KID, CHIVALROUSLY,
ACCORDING TO THE RULES.

of the cold. Hovey's the limit. I didn't say nothing about the conductor being dead. I merely said he was dead to the world. Come into the car and see for yourselves."

The coroner and the undertaker followed the motorman into number four nine.

"Well, where'd he get it?" asked the coroner, looking sheepishly at the prostrate form of the conductor.

"Yes—where in this dry State of Kansas did he get it?" put in the undertaker.

"Say, misters," said Motorman Haskell, "you come over with me to the railroad station. I want you to call up that car-barn foreman and let me hear you tell him just what you think of him—for getting you out

of bed on a cold night like this and sending you down here on a fool's errand."

Captain McCulloch, a Confederate veteran and a Southern gentleman of the old school, is the president and general manager of the United Railways of St. Louis. He wrote a "Manual of Good Manners" for the guidance of conductors on his lines, and had it printed and posted in conspicuous places at all division-points. It included several rules which he wished conductors to observe especially in regulating their attitude toward women passengers.

"While giving courtesy to all men," the rules read, "give chivalry to all women. Be patient. Do not lecture, scold, nor make the sharp retort. Keep silent, notwithstanding there may be provocation."

"Do not offend any woman by word or act," the rules continued. "Do not lay your hands on a woman except to save her from injury. Do not have a woman arrested. Do not contradict her. Do not in any way offer her an indignity."

Now, when most of the Southern trolley-riders in St. Louis read these rules on the big placards at divi-

sion-points, they knew that a Southerner, suh, had written them, and that a liberal construction might be put on them. When a certain St. Louis United Railway conductor read them, however, he recked not that they were penned by a chivalrous soldier from the South. He merely understood that they were the commands of Captain Robert McCulloch, the boss.

He, with all the other conductors, liked the boss down to the ground, because the boss always gave everybody a square deal. Therefore, the conductor in question, who was known to his fellows as the "Kid," resolved to do his best to observe all the rules in the "Manual of Good Manners."

One day, not long after the issuing of the manual, the Kid's car was boarded by a woman possessing the amplitude of proportions of a leader of suffragettes. She insisted upon standing on the back platform.

"Pardon me, madam," said the Kid for the second time; "but will you have the goodness to step inside?"

"How dare you speak to me like that!" screamed the woman, and she swatted the Kid a goodly one on the weather side of his face, reddening his cheek to the hue of a boiled lobster. After which the lady stepped inside.

When she reappeared on the back platform to leave the car it was manifest that her emotion had in no wise abated, for she again screamed, "How dare you!" and again she swatted the Kid, this time on the lee side of his face.

"Thank you, madam," said the Kid chivalrously, according to the rules—as he helped the lady of ample proportions to alight from the car.

"Why, conductor, that was an outrage!" expostulated one of the men passengers. "Why in thunder didn't you have her arrested?"

"Arrest her?" replied the Kid. "Read these rules." He produced a pocket edition of the "Manual of Good Manners."

Obeying the Rules.

"Doesn't Captain McCulloch say here," he continued, pointing to the rule, "that we're to keep silent, even under provocation? Doesn't he say we're never to cross a woman in any way, and, above all, never to arrest her? No, sir; if a woman commits murder on this car she can't get arrested, except over my dead body. It's against the rules. Besides, a scene like that which you just witnessed is part of the day's work."

"The true interpretation of chivalry is that when a woman biffs you on one cheek, turn to her the other cheek to be biffed, and then, more in sorrow than in anger, give the motorman two bells."

When Captain McCulloch heard of this incident he said: "That boy is a gentleman, suh. I'm proud of his display of chivalry."

Not long after that the clerk of the lost and found department came to Captain McCulloch with a handsome hand-bag which he said had been found in one of the cars.

"It looks like it belongs to some millionairess," he said, "and it feels as if it might

be full of dough, so I thought 'it best, captain, to bring it to your personal attention."

"Who found this reticule, suh?" asked the president and general manager.

"The Kid, sir."

"Have the goodness, suh, to bring him here when he comes in from his run."

Accordingly, a little later, the Kid was ushered into the presence of President McCulloch.

The Kid Makes Good Again.

"You found this reticule, conductor," said the captain, "and I congratulate you, suh, upon your honesty, as I have before complimented you upon your chivalry. I take it for granted that you, suh, knew that this bag contained hundreds of dollars in cash."

"Yes, sir; I opened it," answered the Kid.

"Do you happen to know, suh, who left it in your car?"

"Yes, sir. She was a stunner."

"There, there, suh! Do not speak so of a lady. What sort of a woman was she?"

"A ripper, sir. A peach."

"Yes, yes; I know. You would be able to identify her, should you again see her, suh?"

"Among a million, sir."

The next day a handsome woman, superbly gowned, appeared in Captain McCulloch's office at headquarters.

"Oh, I'm so sorry you sent for me," she exclaimed. "I would have let that bag go and let the finder have the money. I would have said nothing about it, indeed."

"I found your address—the Hotel Jefferson—in the bag, madam," said the captain. "I learned from the contents, too, that you are from a certain mining town in Colorado where wealth is taken out of the earth a ton at a time. Nevertheless, it was my duty to notify you that the part of your wealth contained in this bag had been found; and it is your duty, now, to permit me to restore your property to you."

A Generous Reward.

"But that honest conductor!" the lady cried. "He must be rewarded." Opening the bag, she took out a roll of paper money and peeled off three one-hundred-dollar bills. "There!" she said. "Give him that."

"No, no, madam," the captain protested. "It is out of proportion to the amount restored. Besides, so much money will do that conductor more harm than good. I beg you to reward him with less, or, better still, merely with an expression of your gratitude."

"No, I insist," the lady retorted. "Here! You must permit me to give him at least—that," and she handed the captain a hundred-dollar bill.

"It is not within my province to protest further, madam, though I repeat—it will do the conductor more harm than good."

That night the Kid's eyes grew as big as saucers when Captain McCulloch, having called him in, handed him a hundred-dollar bill.

"Be careful what you do with it," cautioned the captain. "Put it quietly away, suh, controlling your impulses, and remembering that it is harder to stand up straight under prosperity than under adversity."

The next day came a letter written on the Hotel Jefferson note-paper. It was signed by the lady who had lost the hand-bag and addressed to Captain McCulloch. It read, in part, as follows:

"I am not satisfied with the reward I gave that very honest conductor. I beg that you ask him call upon me here at the hotel, this evening."

Late that afternoon, accordingly, the Kid was again ushered into the office of the president.

Too Much for the Kid.

"Suh," said Captain McCulloch, "the lady whose bag you found has requested me to transmit to you an invitation to call upon her at her hotel this evening. I cannot refuse a lady's request; neither can you. But I warn you, suh, that she means further to reward you."

"It would not be chivalrous for you to decline to give the lady the pleasure of giving money to you, suh, so I cannot insist that you refuse what she offers. What I do say to you, suh, is that if chivalry compels you to accept more money from this lady, be extremely careful as to your conduct after you leave the hotel. Remember, suh, what I said to you before about controlling your impulse."

Three days later a division superintendent dropped into Captain McCulloch's office to say:

"Lost one of the best conductors on my line."

"Who?" asked the captain.

"The Kid."

"Lost him? How, suh?"

"He's quit his job, and the last I heard of him he was still celebrating some good fortune—we don't just know what. Anyway, he's going round town spending money like a sailor after a cruise."

"Well, suh!" exclaimed the captain. "Ain't that just—a woman?"

"Woman!" replied the superintendent. "I said nothing about a woman."

"Yes, I know, suh. Nevertheless, we've lost one of our best men because of a woman's doggoned emotionalism!"

"Captain," the division superintendent cried with mock severity, "your own 'Manual of Good Manners,' sir, forbids you to speak that way of a conductor's sweetheart. I am profoundly surprised, sir."

The Girl in the Green Dress.

For a long time motormen and conductors in East St. Louis wondered why Sam Bix, the best-looker and niftiest dresser on the line, did not marry The Girl in the Green Dress.

Sam Bix was a motorman on the Alta Sita Division; and she—she was called The Girl in the Green Dress because she happened to wear that selfsame gown of green pongee at every dance given by the employees of the East St. Louis and Suburban throughout the entire winter social season of 1909-1910.

Sam himself said the dress made him think of "one of those green boxes of tobacco from Richmond."

"She never burned the tongue," he said, "and her airs were as graceful as the smoke that floated up from a pipeful of the said tobac."

When Bix Lost Out.

"Well, then, why didn't you marry her?" Sam was asked by one of his coworkers. "You sure kept company with her the whole season. You took her to all the dances up to that night we gave the ball for the benefit of the Cherry Mine sufferers. After that—say, what happened that night, anyhow?"

But Sam Bix, the motorman, would not vouchsafe a word as to the cause of the estrangement between him and The Girl in the Green Dress. It was months before he at last volunteered the following:

"Well, you see, it was like this. That night, at that dance, I felt it in my bones that it was nip and tuck between me and me deadly rival, that rah-rah conductor that was as stuck on the girl as I was, only he was a strongheart and I guess I wasn't. You remember we called him the rah-rah conductor because he had been in college once as a dormitory janitor.

"Take me oath! On the night of that ball that we gave for the Cherry Mine victims, I knew it in me heart that I must win her promise to marry me or else the rah-rah conductor would open his yap and walk off with her.

"Well, she and me danced a two-step. Then off she glides into a waltz with me deadly rival. Gee! but it was maddenin' to see her smilin' at him the same way she smiled at me—as she waltzed in his arms round and round the ballroom.

"Then it came my turn for another two-step with her.

"This time,' I says to myself, 'I'm going to pop the question for sure.'

"But round and round we whirled, and me no nearer to the point of popping than at the beginning. And so it went on, she dancing first with me and then with me deadly rival, and me all the time tryin' me best to rake up the nerve to let out that I was dead stuck on her, and wanted that her and me should announce our engagement to marry.

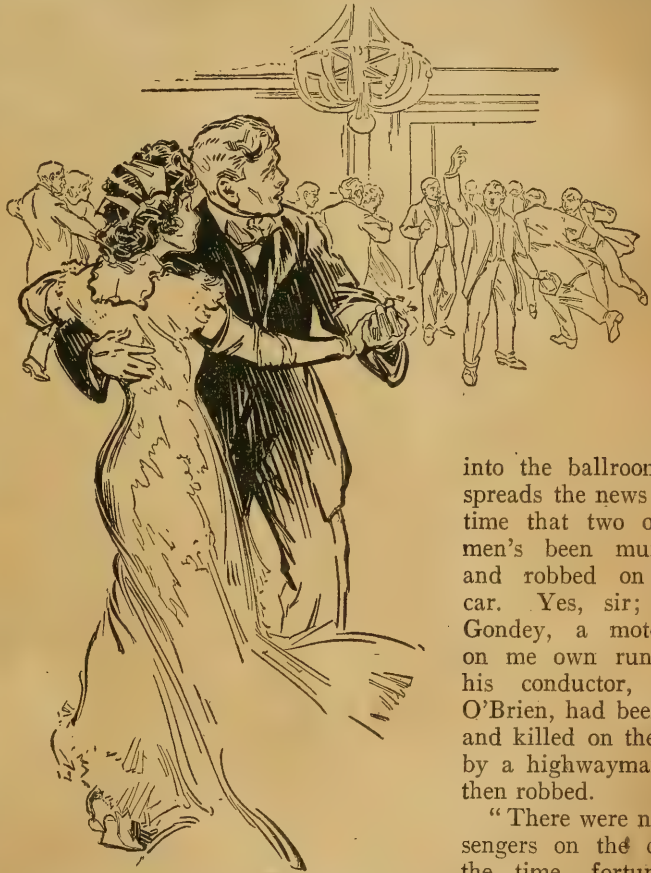
"Well, midnight comes, and with it me own turn to do another two-step with her. As I starts in I resolves that this time I'll pronounce meself in the very first time around.

"You think I got the chance when I was plumb clean stronghearted and ready to talk

business? Not on your life! Just as we got half-way round, and just as I begins the song and dance about her bewitchments and about wanting to enter into partnership in this here game of life, presto! the party broke up."

"Broke up? What for?"

"Well, our barn foreman comes rushin'



"OUR BARN FOREMAN COMES RUSHIN' INTO THE BALLROOM AND SPREADS THE NEWS IN NO TIME THAT TWO OF OUR MEN'S BEEN MURDERED AND ROBBED ON THEIR CAR."

into the ballroom and spreads the news in no time that two of our men's been murdered and robbed on their car. Yes, sir; Gene Gondey, a motorman on me own run, and his conductor, Mike O'Brien, had been shot and killed on their car by a highwayman and then robbed.

"There were no passengers on the car at the time, fortunately, for the robber set the car going, and it ran wild for four miles into the outskirts of town.

"Well, sir, our barn foreman calls upon every man present at the ball to shake his girl and get into a posse to catch the assassin. Could I refuse to join 'em? Say, what you take me for? Gene and Mike were friends of mine, and I was for chasin' their assassin, and bein' in at the landin' of him. So, right in the middle of that two-step, when the music stopped for us all to listen to the news, I says to the girl, I says:

"I must skidoo. But I ought to be

back in two hours. There'll be a few men left here—fellers that ain't in the railroad push. Will you wait here for me till two o'clock?"

"Oh!" she says, expectant-like. "What was it you were beginnin' to say to me, Samuel, a moment ago?"

"Wait till two," says I, "and I'll finish that song and dance. Will you wait?"

"Sure!" she answers. "I'll wait till two."

A Midnight Man Hunt.

"With that I hastens away and looks back and sees that rah-rah conductor—me deadly rival—on the job. I mean that I saw him lookin' into the girl's eyes and playin' the talk game for all he was worth in the minute allotted to him before he had to join the possemen.

"Wonder what he's sayin' to her?" I thinks. But just then he leaves her, and then the mob of us leaps to the chase, led by our barn foreman.

"We scattered all over East St. Louis—and finally I lost the bunch entirely and conducted the search on me own hook. Two o'clock comes. Gee! but I was sweatin' blood then. I was miles from that ballroom. 'Would she wait?' I wondered.

"To Hail Columbia with the assassin!" I says to meself. 'I'm for beatin' it back to the ball.'

"Well, sir, I reaches that ballroom at exactly three—one hour late. Is the girl there? Not so's you'd notice her? Is any one at all there? Not so's you could see 'em—except the janitor, who was a friend of mine, and to whom I says:

"Jim, did you happen to notice when The Girl in the Green Dress started for home?"

"Sure!" Jim says. "She left when all the others left."

"Alone?" I asks.

"Well, now, Mr. Bix," he says, "in the jumble of confusion attendin' the departure of the parties, I can't be certain; but I do think that The Girl in the Green Dress was taken home by that conductor whom you all speaks of as the rah-rah. And, by the way, Mr. Bix, it was he who caught the man that killed those poor trolleyman to-night—Heaven rest their souls!"

"Oh!" I exclaims. "I had forgotten all about the assassin. So the rah-rah got the assassin, did he? Did you happen to notice what hour it was when the rah-rah showed up here?"

"Sure, Mr. Bix. It was exactly two o'clock. I see him go to The Girl in the Green Dress with his watch in his hand, and I see him point to the watch and say something, lowlike, to her. She looks around at the door a moment—bless her heart!—as if maybe expectin' to see some one else come in. But, seein' nobody, she nods her pretty head to the rah-rah and takes his arm."

"Well, there you are," concluded Sam Bix. "That rah-rah conductor had promised to be back in the ballroom at two. He was there on the tick, and I wasn't. The rah-rah was there with goods both ways, for he got both the assassin and The Girl in the Green Dress. Don't ever say posse to me. It makes me feel awful disgusted. That's why I'm still a bachelor."

RAILWAY MATHEMATICS.

THE porter was greatly perplexed. At High Polsover a lady with a lorgnette entered the train.

She was a middle-aged, tall, angular, tailor-made woman, and she looked sternly at the commercial traveler in the seat opposite through her lorgnette. Before seating herself she opened the carriage window, and sent it down with a bang. When the train arrived at Hilsdon Cross another woman entered the compartment.

She had fluffy hair, and an appealing look in her blue eyes. She sat down and glanced at the open window and shivered pathetically; then she looked at the commercial traveler.

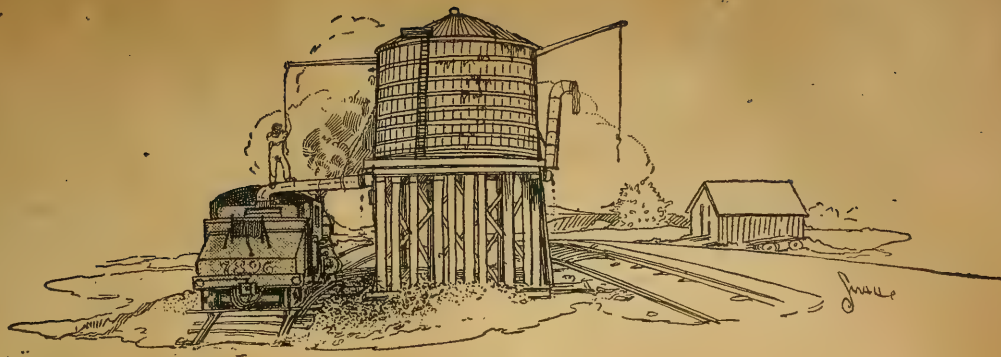
"I shall be frozen to death!" cried the fluffy-haired lady.

"If this window is closed, I shall suffocate!" cried the other woman.

The porter opened his mouth. He started to raise the window. Then he retreated. Dazed, he turned appealingly to the commercial traveler. Both the women also turned to the commercial traveler. That gentleman rose, passed by the ladies, opened the door to the platform, and went out, followed by the porter.

"And what, sir," said the porter, "would you say as 'ow I should do, sir?"

"It's quite simple," said the commercial traveler. "Leave the window as it is, open, till one lady is frozen to death; then close it and suffocate the other. I'm going forward for the rest of the trip."—*London Opinion.*



THE SIXTY-HOUR TRICK.

BY GEORGE H. FELLOWS.

The Particular Brand of Obedience that Caused
the Frayed Nerves of Billy Stephens, Operator.

WORKING days now, Billy?"

"Does it look like midnight to you? Get something done for your eyes if that's the

best you can do with your lamps."

"Oh, you don't need to get so smart about it. I know it's daytime now, as well as any ham operator on this road; but when a man condescends to ask you a civil question, why can't you stand the strain long enough to answer it in a half-way intelligent manner? If your brains are too feeble, I'll put it this way—are you on the day trick now, or are you just working for your health?"

"Yes, I'm on the day trick, and I'm on the night trick, too; and if any idiot of a brakeman tells you it's for my health, send him to me."

"Is Jim laying off?"

"Sick, so he says."

"Did you work yesterday?"

"You bet I did. And the night before, and last night and to-night, and to-morrow, and so on for the next two weeks, unless he gets back, or this old half-baked excuse of a road hustles around and hires a few more operators."

"You've been on duty forty hours now,

and no relief in sight yet! Well, you're a bigger fool than I gave you credit for; and that's going some, Billy. Why don't you go home?"

"Maybe I wouldn't like to, Jim. Nobody knows better than I that I'm taking a long chance on getting into trouble; but old Hale says he hasn't got a relief man in sight, and don't know where he can spare an operator at any price; and I hate to be a quitter. Jimmy may be back in the morning, and I'll try and stick it out, but say: I'd give my next year's pay if I could lay right down now and sleep and sleep—oh, gee!"

Jim Barclay, conductor of train 95, looked the speaker over for two or three minutes before answering.

"Son, if I was on a passenger train due to go through your block about two to-night, I'd get off and walk. I don't object to being killed when my time comes, but I ain't wishing it to hurry none. If you've got any sense and want to save yourself from an interview with the grand jury and a few hundred ghosts in the near future, I'd advise you to go home and go to bed to-night, even if you have to lock the office and make everything flag through."

"Too much switching and other things

here, old boy, to talk about locking the office. This ain't no one-horse, country station and you know it. I haven't any particular desire to answer guilty to the charge of manslaughter, but I think I can stick it out another night, and then—oh, well, when morning comes, I'll think about it," and he slammed the lever over with an extra vicious bang, as he began setting the switches for the local to cross into the yard.

"MO" tower, as Billy Stephens had remarked, was anything but a one-horse, country station. The amount of wire work alone would have deprived it of that title, while the work on a thirty-three-lever interlocking plant, assisted the operator in keeping his mind off his troubles, as Barclay had once expressed it.

The tower was situated near the center of the yards at Ripley, where incoming freights crossed from the main tracks to their place in the lower yards, and outward-bound trains also used the switches as a beginning of their run to Silverton, one hundred and twenty-four miles west.

The roundhouse and repair shops were situated on the outer edge of the yard tracks nearly opposite the tower, while the tower itself, perched high on its long steel legs, seemed to be keeping a careful watch on the numerous switch shanties and yard offices scattered promiscuously over the yards.

Suddenly the tower door burst open and flew shut again with a bang that equaled the noise of the levers as Pierson, the yard-master came puffing in.

"That west-bound coal drag has to run in for water," he puffed. "Just had the con on the phone from the lower yards. Look out for him, Billy."

Billy glanced at the clock. "How's No. 54? Pretty near ready to pull out, aren't they?"

"Guess so; in about ten minutes," the yard-master replied.

"Then your coal drag will have to shove his train in off the main, No. 32 will follow 54 as closely as the law allows; and say, tell him to step lively, please. He can't have the crossing all day; 39 and 41 are both on time. He can have about six minutes to clear after I give him the switches, and no more."

As the "Y.M." went out, Stephens shouted to him from the window. "Say, Al, tell Wilson to get a move on him, will you, please, or he won't be able to make the

siding at 'Q' ahead of No. 32. She's right on the dot."

"All right, Billy, he'll be moving soon as he can try the air."

The local was clear now and the switches set for 54. Billy jumped to the table, took her orders and turned back to the levers to give 54 the block, just as two short blasts of Wilson's engine called for the right of way. Then followed a series of maneuvers, that would have done credit to a general on the field of battle, but which are only regarded as commonplace, in daily railroad routine.

No sooner had the caboose wheels of 54 rattled over the switches, than they straightened with a snap, and the signals dropped to clear just in time to avoid slowing 39, the fast mail. Red, they flashed again as the busy levers set the rails for the coal drag to back into the yards for water.

Clear again, just in time for 41, the fast passenger following 39, and clear the other way as 54 left the block beyond open for 32. Red again to protect 32 until she got out of the block, and then clear for the coal drag to pass on its way. Incidentally Billy Stephens received three messages for the "Y.M.," besides blocking the trains.

"No. 54 didn't get away quite quick enough. He's holding 32 on the block this side of 'Q,'" Billy remarked to Jim Barclay, who was still leaning against the rail at the counter.

"I suppose I'll hear from that, but I didn't see any better way to do it just then. They ought to be able to stand two minutes without busting a blood-vessel," and he turned to the table to send a bunch of messages the call boy had just left.

Barclay picked up his bucket and lamp and prepared to go home. "Well, son, I wish you good luck, but I can't see why you don't beat it before you put your foot in it."

Billy stopped calling a minute and swung around in his chair, looking thoughtfully at Jim for a few minutes before he said:

"I wish I could, but I can't see it that way. The rules say, 'Operators and signalmen shall remain on duty until relieved, unless otherwise ordered.' It hasn't been ordered otherwise, and that's a cinch. Of course I'm tired, but that can't be helped, the old man probably knows it as well as you do. The only thing I can see is to take a fresh grip and stick to it—'until relieved,'" he added as he turned slowly back to his work.

Barclay looked at him a minute, slowly shook his head, and passed out through the door and down the stairs.

"He's got grit," he murmured, "but it's a tough proposition he's up against and he's about all in. When a man's face gets the color of his, and his eyes look like that, I call it a mighty doubtful bet as to his keeping awake all night to-night," he thought to himself as he walked home.

In the tower, the day wore slowly on—switches, orders, messages, car reports—car reports, messages orders, switches, and the ever-present telephones. At times Billy wearily closed his eyes and drew a long breath as he leaned back in his chair for an instant's respite. Then as he felt the tempting slumber stealing on him, he would start up with a jerk and bend to his work with ever-tightening nerves. He must do it. He would do it.

Jim Allen would certainly relieve him in the morning and surely he could hold out till then. But oh, if he could only lay down and sleep an hour before the long night came on—the third of his "day's" work. No, there would be no sleep for him, "until relieved." He wouldn't dare! Once asleep, it would be all off. He must keep his eyes open, or give up.

But, pshaw! It was only a matter of fourteen or fifteen hours longer, and he could surely keep awake that long! Suppose, however, Allen didn't show up in the morning! Never mind, there would be time enough to figure on that later. Just now it was his business to keep awake.

"I want you to understand, Billy Stephens," he told himself fiercely, "that you are on the job, and you've got to keep awake. Understand? Just got to. You're not going to lay down on the job—not till you're relieved," and again he plunged into the work before him.

At five-thirty that afternoon he got the call boy on the wire and arranged for him to bring his supper "and Johnny, tell Mrs. Wiley to give me about two quarts of the strongest coffee she knows how to make, and not to put any milk in it. Tell her to be sure and make it strong." He shouted the word through the phone with so much energy that he nearly knocked Johnny off the chair at the other end.

The supper came in good time, and after eating, and drinking a liberal amount of the coffee, he felt very much better. Several times that afternoon he had taken time

to dash cold water over his head and face, and now he repeated the operation. Then he brought out his pipe, filled and lit it, and leaned back in his chair.

Why, surely, he could stand another night. He wasn't any mollicoddle, and he was on the job to stay—"until relieved." The wires and trains were nearly quiet. It was supper hour, and Billy's thoughts drifted to his home in the East. His sister Nell, would be getting supper and perhaps planning a letter to him. He wondered how his mother was feeling.

He must write her in a day or two. She was not very well when Nell wrote last and she was getting along in years. He must stick to his work and send her a nice present next month. Then things began to run together, and Billy started up with a guilty, half-thankful feeling.

"I almost did it then. I've got to watch out. Just about three seconds more, and your uncle would have been in the hay."

The door burst open behind him, and the next minute the conductor of No. 92 was asking for orders out. Billy stood up, stretched, bent over the key, and was at it again. The time passed quickly until about ten o'clock, as the familiar routine kept him busy. Every few minutes he drank sparingly of the black coffee, and again and again bathed his face with cold water. He was standing it pretty well he thought, and looked forward thankfully to the morning and his relief.

Then Jim Barclay came in to get orders out for his train.

"Well, how are you standing it, Billy?"

"Fine and dandy, Jimmy. Have a good sleep?" Somehow sleep was before his mind all the time.

"Yes, first rate. Feel like an air-ship."

"Always thought you'd fly away some day, Jimmy."

"Well, I didn't mean it just that way, though I do feel like it sometimes, when I'm breaking in one of those green brakemen. Say, did I tell you about the one I had the other day?"

"No, guess not. Who was it?"

"Denman was my engineer that trip, and when we got to 'RX' we had to get in the clear for No. 18. You know that's a spur siding there. We had to pull by and back into clear. The station is in the way there, so Denman couldn't see my signals. So he told this new boy to get out on top and tell him what we said.

"Well, he waited and waited and waited, till he thought we must be tearing the switch to pieces and putting it together again. Then he began to listen, pretty anxious like, for 18's whistle.

"Every few minutes he'd holler up, 'What are they saying? Ain't they said anything yet?' till by and by the feller answers, 'They must be having some sort of trouble up there, I guess; they haven't said a word to me yet, but they seem to be fighting like the very dickens with their lanterns!' Now, ain't it a wonder I ain't killed some of these nights with men like that on the head end?"

Billy laughed at his old friend's story, and the dry, abused sort of air he maintained in telling it.

"Tell you what, Billy," he said as he picked up his lantern to go, "let's you and I quit. Resign to-morrow. Gee, wouldn't we leave this road in an awful hole, if two such good men as you and I quit all to once, or—simultaneously, as it were?"

"My conscience wouldn't let me do it, Jimmy, old boy," said Billy with a laugh, "not to mention Mrs. Barclay."

"You're right there, my boy!" and Jim closed the door behind him.

Levers and messages, messages and car reports, car reports and the telephones—the same old song, and the night wore slowly on. At one in the morning, Billy was fighting the fight of his life. The sweat fairly stood on his forehead at times in his effort to keep his eyes open and his wandering faculties at command. Up and down the floor he staggered, every few minutes; down in his chair, working a while, then to the bucket for another dash of water. Tired! He never had any conception before of what the word meant. He was almost ready to barter his soul for sleep.

At three, he sat down to clear up a pile of car reports which would take about forty minutes of sending. After that was over, the greater part of his night's work would be finished. He settled down in his chair, his eyes staring blankly before him, and began to call "AB—AB—AB—AB—AB—MO—AB—AB—AB—MO."

"I—I, AB," came the answer.

"HR," he began, and the drowsy, steady rattle of the instrument went on and on, as he turned sheet after sheet.

The window in front of his table looked down the tracks west from the tower, and glancing up occasionally he could see the

faint glimmer of his home target through the hole on the reverse side of the lamp. It was set to red, for the yard engine was using the main track to switch on for a few minutes. After sending about half of the pile, he looked out to see a half-dozen cars that the yard engine had kicked out, standing on the main track.

What was that the instrument at his right was saying? — — — — "OS—OS, No. 11 by 3.21 A. M. A. G."

No. 11 coming and those cars standing on the main! He would have to get that yard crew after them right away, and give 11 a clear track. He started to get up and get his lamp. What! He couldn't move! He tried again, but he couldn't stir a finger. It must be paralysis.

He had read of people stricken that way.

The overwork and loss of sleep had been too severe a trial. Barclay was right. He had gone too far and put his foot in it. He tried again, straining every nerve. The sweat started from every pore. He must get up. He must clear that track. But no, it was only too true, not a move could he make.

He ceased his efforts and tried to think. He had given "RM," the next block, "Clear," after 21 had passed. "RM" would let 11 through without doubt. He tried to reach the other key, but he could not even move his fingers. He tried to shout. Perhaps he could attract some one's attention, though the chances were small, with all the noise of the instruments inside and the switch engines outside; but still, he would try.

He tried as though his life depended upon it, but not a sound could he make; not even a whisper. What an awful condition he was in! Was there no way out? His mind worked with the rapidity of lightning. He couldn't signal, he couldn't call, he couldn't stop them by the wire!

But pshaw! Why hadn't he thought of it? His signals were set red, and No. 11 would merely come to a stop and whistle for the signals. A waiting passenger train, whistling for signals, would soon bring help, and then everything would be all right. At least, all right as far as the road was concerned. He thought, whimsically, that they would have to find a relief for him then. His railroad days were over.

Hark! What was that? Number 11's whistle! They were making good time

evidently. Yes, there was her headlight coming around the distant curve! Well, it would soon be over, and there would be one less operator.

Why doesn't she slow up? His hair seemed to raise on his scalp! No. 11 was coming down the track at top speed and only a train's length from his signal! On it came! Was it a crazy man at the throttle, or had he been stricken as Billy had? Couldn't the man see?

Oh, for the power to move! To do something!

A hundred yards! Fifty! Now!!

Bang!!!

Billy found himself standing on his feet and trembling in every limb. The slam of the door behind the night yardmaster had awakened him.

"How's No. 11, son?"

"About on time, I believe, sir," he faltered out, and glanced at the clock.

It was three-twenty-five! He had been asleep six minutes! No. 11 was still twenty-three miles away! Thank God!

"Please get those fellows off the main for them, will you?" he said to Pierson.

"Off the main? Why, they've been clear of the main for twenty minutes. Were you asleep, son?"

"Perhaps I was, sir. I'm all right now, though."

He staggered to the levers and straightened the track for No. 11. When the signals were clear again, and all was O. K., he sank wearily down in his chair to discover that his key was wide open.

He had fallen sound asleep while sending to AB.

"BK, excuse me a minute, sorry kept you waiting," he faltered, and closed the key.

Six o'clock found Billy watching the street-cars from the tower window. Allen would surely show up this morning.

Was that he? No! Yes, it was! Billy Stephens felt a rush of thankfulness such as he had never felt before. His long day's work was over! Sixty hours! Sixty hours of nerve-racking work, and some of it the worst agony he had ever experienced in his life.

"Hallo, Jim, old boy. I'm mighty glad to see you. Just take right hold as if you worked here. I'm going home to bed now, and wo to the one who dares to call me till I wake up again," said Billy as he made a dive for his coat and hat.

"And say, Jim," he added, "just work till you're relieved!"

ANOTHER EAGLE-EYE HERO.

Engineer Petit, of the Wheeling, Swings Out on the Pilot and Snatches a Child from Track.

THERE are many persons who are inclined to regard the rescuing of a child from death beneath the wheels of an on-rushing locomotive as a wild dream of melodrama writers, but had any of them witnessed the heroic act of Charles Petit, an engineer on the W. and L. E., who risked his life recently at Coshocton, Ohio, to save a tiny girl who sat between the rails, their views on the subject would have undergone a decided change.

The only witness to the thrilling affair was the child's mother, Mrs. George Markley, who, glancing out of a window saw the child on the tracks and the events which followed in quick succession.

Mrs. Markley had left little Mary for a moment in a room in the house while she went up-stairs to dress.

The child stole from the house and walked out to the railroad where she sat down in the middle of the track. She sat there perhaps five minutes when the afternoon train due at Coshocton at 2.55, north-bound, came down the tracks.

Engineer Petit, whose home is in Cleveland, was in charge. He didn't see the child until he had reached the crossing at Seventh Street, scarcely a half block away. The whistle screeched but the child paid no attention to it.

Petit, seeing that he could not stop his engine in time to miss the child, left his cab and ran along the running-board at the side of the engine to the pilot. Holding to the pilot with one hand and bending his body far out over the tracks he swooped the child in his arms and, with a mighty grip, pulled both the child and himself safely to the engine pilot. He then rushed back to the cab with the child in his arms, applied the brakes and brought the train to a stop at the Orange Street station.

Mrs. Markley, the mother of the child, had glanced out of the up-stairs window just before the train hove in sight, and when she saw her child's plight she became helpless and nearly swooned.—*Coshocton Daily Age.*

THROUGH BY SUNRISE.

BY WILLIAM S. WRIGHT.

A Haughty Father Exiles His Son and a Villain Hurls Disgrace.

CHAPTER I.

Love by the Sea.



THE cottage was set high upon the most elevated part of the island, and the island—Copper-Clad Island the sailors called it—was off the Scottish coast where the waves beat high and the wind blows fresh and straight from the Arctic. The cottage was a humble one. It was as white as whitewash could make it, and wreathed with trailing vines.

On a chair under a giant tree in the spacious front yard sat a young man of marked appearance. He was handsome—but for the paleness of his face, and the sad expression of his eyes. That he was ill at ease was plainly evident. On several occasions he started, gave a glance toward the sea, and each time that he did so he breathed a sigh of keen disappointment.

Occasionally, he would glance toward the cottage, but no one seemed visible there. Then he would sweep the front stretch of ocean with his gaze.

The sun was just sinking, and even while its last rays lingered upon land and ocean, a black cloud was gathering in the northern sky. Observing this, a shadow passed over the face of this man, and he said:

"There is a storm brewing, and if so, Mr. Moreland may not reach us to-night. A storm brewing! Yes, for me and my loved ones. I *feel* that there is, and that its bursting will be terrible. Must I ever suffer this agony of mind? Why will he thus follow me? Is it not enough that I have retired from the world, and no longer bear his name? I would be happy with my wife

and children, but for this dread which is ever hanging over me. If I could tell *her*, it might relieve me; but, no—I have deceived my wife, and I must endure *alone*."

He relapsed into silence again. He had not observed the approach of other parties. While he had been speaking, there emerged from the cottage a woman, leading by the hand two little girls dressed in white. Softly they came forward, as if to surprise the speaker; but his last words were heard, and the woman suddenly stopped, while an expression of anxiety passed over her face.

The children bounded to the man's side, and, in chorus, exclaimed:

"See, papà, we are ready."

The man arose to his feet, and fixing his eyes upon the woman, he appeared trying to read her thoughts. It was evident from her manner that something had affected her.

"Blanche, did you hear my words?" he asked.

"I did, Herman."

The answer was given slowly, and the woman appeared to dwell upon the last word, as if she would convey some especial meaning by doing so. This was observed, and the question asked:

"Did you hear me speak of having deceived you, Blanche?"

"I *did*."

"Why do you dwell upon that last word with such peculiar emphasis? There always has been a smile upon your face when you so addressed me. Will you explain?"

The woman came forward and encircled the man's neck with her arms. She gazed up into his eyes, while tears glistened in her own. Then, in a sweet and almost pleading voice, she said:

"Herman, for five years my happiness has been almost complete. I have tried to

make our home a pleasant one, although I may have failed in my efforts. Many times I have seen a cloud on your face, and I have sought to learn the cause, that I might share your griefs. Herman, you have some secret which you have kept from me, and—oh, heavens! I heard you say that you had deceived me. Look upon these children, Herman, our little twin cherubs, Blanche and Lillian. To-morrow will be their third birthday, and the neighbors will gather to greet us. Let us all be happy!”

“What has come over you, you act so queerly?” asked the man, with indifference, as if trying to avoid the woman’s pleading.

“I will explain, Herman. Several times of late my attention has been attracted by the sudden appearance and disappearance of a stranger. He would pass my window, gaze in, but would not speak. I thought very little of the matter—not even enough to make mention of it to you. But—”

“Go on, Blanche.”

“But a few moments ago I was standing by my window, when suddenly I felt my arm grasped. I was somewhat startled, but still more so when a voice whispered my name. At the same time a letter was thrust into my hand. I turned and recognized the stranger; but he instantly disappeared behind the vines.”

“Well, the letter?”

“I opened it, and the first words that my eyes fell upon were that I have been deceived by you.”

“And you believed this?”

“No. I crushed the paper in my hands, and threw it upon the floor in my indignation. Then I reflected for a moment, and came to the conclusion that it was only worthy of contempt, as I fully believed that some malicious person, jealous of our happiness, had sought this means of marring it. Why either you or myself should have enemies, I cannot tell. At first, I thought I would not annoy you, even by mentioning the matter, but finally concluded to bring you the note. I have not read its entire contents.”

“And yet you believe the charge?”

“I do not.”

“Then—why this unusual agitation?”

“I will speak frankly. Could you have seen my face as I approached, you would have observed that my usual smile was there. But I heard your words. You spoke of having deceived me. Then it occurred to me that there might possibly be some truth

in the assertion contained in the letter, and this thought nearly overcame me.”

“Do you believe me in all I say and do?”

“I do, my husband; yet I tremble as I look at you now. There is something which tells me that a great weight presses upon your heart. Each day you are becoming paler, and more silent and thoughtful.”

“Am I less affectionate than formerly?”

“Oh, no. You seem even to increase in tenderness. Can’t you make me your confidant?”

“Blanche, my deception had been in simply withholding the secret of my life. But you shall soon know all. I am expecting our friend, Mr. Moreland, from Southampton this very night. When he arrives, then I will explain. In the meantime I want to see you smile again.”

There was an unmistakable fervor in the voice of the husband as he spoke and pressed his wife to his bosom. Tears glistened in her eyes, but the sweet smile she wore plainly told the fact that her confidence, for a moment shaken, had been fully restored.

Fondly the father caressed his little ones. Darkness was coming on. The sky had become thick with clouds, and the moaning of the waters mingled with the bellowing of thunder. Entering the cottage, they proceeded to a sleeping-room up-stairs.

Seating himself, Herman Tillman opened the crushed note. He started as his eyes fell upon the handwriting, and there were unmistakable signs of indignation upon his face as he perused it. Then he said:

“Blanche, I will read you this.”

“If it pleases my husband.”

“Yes—it runs as follows:

BLANCHE:

It is best that you know the truth. Your husband is a robber, a forger, and a murderer. He is living in seclusion on this island to avoid detection and arrest. But his days are numbered. In a short time you will be alone, unless you will consent to accept the protection of one who loves you for yourself. I shall be present to-morrow at the celebration, and you may expect to witness important and interesting scenes.

AVENGER.”

Neither husband nor wife uttered a word for some moments after this reading. Then the mother arose, and, preparing her little ones, placed them to rest. During this time Tillman watched her with deep interest. She smiled, but it seemed to require an effort. She was deeply agitated, and trem-

bled visibly in spite of her efforts to prevent doing so.

At length she approached her husband and, tenderly embracing him, said:

"Herman, let us kneel and ask God's protection."

There was a loving confidence in the tones of that noble wife, and the scene was an impressive one, as both bowed before their Maker. The words uttered by Blanche were touching, and when the prayer was ended, there came from the husband's lips a responsive amen!

The wind had been increasing without, and the rain was falling in torrents. The crashing thunder pounded the heavens, and the lightning-flashes were almost incessant.

The dark form of a man emerged from among the vines, and paused under the window where the light was burning. Then he began to clamber up the trellis. In a moment he reached such a position that he could command a view of the interior of the apartment.

For some time he watched the proceedings of those within. He could hear their words, and they seemed to madden him. Slowly he drew a pistol from his pocket, raised it, and took careful aim. It was at the moment when the husband and wife knelt.

The arm which held the weapon of death was halted, as if the murderous act had been prevented by some unseen power.

In a moment after the villain reached the ground, and as he slunk away in the darkness he muttered:

"My plans are well laid, but I must be cautious. Maddened by that sight, I came near committing a rash act to-night. But to-morrow shall see my work advancing. I shall have gold. No longer will I be a poor man, but a gentleman of position.

"My tools are ready for my work. Poor simpletons, how easily they are deceived! I will go among them now, and see that they are ready for early action. Then to-morrow! For England and a happy life!"

CHAPTER II.

The Accuser.

THE following morning was filled with sunshine. Millions of dewy gems were glittering upon the vines and the flowers; the birds were warbling their glad songs; the waters of the channel shone like

burnished steel in the sun, and many a white-winged vessel could be seen gliding over its bosom.

The Tillman family were early astir, and the little ones were clad in their robes of white. They knew it was to be a gala day for them.

Herman Tillman was paler than usual, but his wife appeared to be especially gay. That it caused her something of an effort was evident, but she had confidence in her husband. That some villain was making an effort to crush them, she felt sure, but she believed that he would fail.

For some time Herman had been standing by the window. Presently he turned to his wife and asked:

"Blanche, is it not understood that those who are to visit us to-day shall come dressed in holiday attire?"

"Such was the understanding, I believe."

"But what does this mean? Yonder comes a body of men, accompanied by a few women. There are no children with them! They appear to be excited!

"Look! Some of them are armed! What can it mean?"

Blanche Tillman clutched the back of a chair. Something unusual was taking place. She thought of the letter and the threats made against her husband.

Nearer and nearer came the men, and, at length, paused before the cottage. Tillman was called upon to appear. Advancing in a cheerful manner, he extended his hands to several with whom he was intimately acquainted.

They turned away. Murmurings burst forth from almost every lip. At the same time a threatening movement was made as if to seize him.

It was not strange that Tillman should exhibit a little agitation, or that his cheeks became a shade paler than usual. To the men, his agitation was a confirmation of that which they had already heard.

Blanche stood by the side of her husband, trembling, and the children clung to their mother in fright.

At length Tillman asked:

"Friends, what is the meaning of this? Your greetings are far different from what I expected."

"Let me answer you," exclaimed Peter Raymond, a severe-looking man, stepping forward.

"What does this mean, Raymond?"

"You see, friends, he knows me?" said Raymond.

"Yes—yes," was the general response, and another threatening movement was made. Tillman met this with a proud expression, and, addressing Raymond, he asked:

"What have you to do with me? What is the meaning of all this?"

"It means that I have found you out! You murderer!"

"Murderer!"

"Yes, robber, forger, and murderer."

"You—you—"

"Take care!" yelled Raymond, interrupting. "I can prove what I say."

"Then do it—now," said Tillman.

Turning to those around him, Raymond said:

"Friends, I come among you as an avenger. Some years ago there dwelt in London a poor family by the name of Gorman. They had an only daughter, called Blanche. By chance this young and innocent girl formed the acquaintance of one she supposed to be an honorable man. But he was not. He was a villain of the deepest dye. Still he managed to win the love of Blanche, and made her his wife. I am speaking of the woman before you. Now let me ask her one question. Blanche, was not your father murdered in the streets of London?"

"Yes, oh, yes," was the trembling answer.

"Still another question. Did your mother die a short time after of a broken heart?"

"Yes."

"I will tell you the author of all this. Your father became acquainted with the true character of George Clifford, the person who now calls himself your husband, and who is known here as Herman Tillman. Your father was an honest man, and, meeting that villain in the street, upbraided him. Clifford killed him."

Blanche groaned in despair.

"Hear me further," continued Raymond. "Your mother died soon after, as I have said. You were alone in the world. Taking advantage of this, Tillman urged you to an immediate marriage. You consented, and became, as you supposed, the wife of an honest man."

"For a time you remained in London with your murderer husband, living in the utmost seclusion. The reason for this was, that a price was set upon the head of George

Clifford. So closely was he hunted that after a time he came here for safety, and here I have traced him. Is not the fact that he has been living under an assumed name, and seldom seen abroad, a convincing proof that something is wrong?"

"It is," was the general response.

"Do you not confess, Blanche, that you were married to this man under the name of George Clifford?"

"Yes—yes," replied the poor woman faintly.

"Have you finished your story?" asked the accused.

"No. I have much more to say."

"Then say it."

"Friends, have you not, since the residence of this man among you, found at least three bodies upon the coast, with the appearance of having been murdered?"

"Yes," was the response.

"This thief, robber, forger, and murderer, came among you without the means of subsistence. He has not toiled honestly as you have done. Where has he procured his money? I will answer the question for you. When some passenger with treasure about him, escaping from a wreck, had managed to reach your island, this villain murdered and robbed him. I, myself, was on the brig Harvest when she foundered in the channel. I know that one small boat, containing six passengers and quite a quantity of gold, set out for this point. The boat was afterward found, but the men were never heard from. It was about this time that you discovered the bodies referred to—was it not?"

"It was."

"I charge this villain with having robbed and murdered them."

"You cheap liar!" cried Tillman, as he sprang upon his accuser. He was seized and prevented from doing Raymond an injury. In a few moments, however, he became more calm, and said:

"Go on, Raymond. Have you anything more to say?"

"Last night, during the storm, an old man landed upon this island. He had come from Southampton, as a passenger. His name was Moreland, and we learned from the captain of the vessel that he had a considerable amount of money with him."

"I know Mr. Moreland, and he will give the lie to your story."

"You see, friends, the evidence is coming in, if anything additional was required.

He confesses to have known the murdered man!"

"Murdered!" repeated Tillman, in surprise.

"Oh, we are aware of all. Well, I was passing along when I heard cries for help. I hastened to the spot from whence the sounds proceeded. I was just in time to see a form disappear in the darkness. But I found an old man struggling in the agonies of death."

"Was it Mr. Moreland?"

"Notice his pretended surprise, friends. Well, I bent over the dying man. He grasped my hand and said, faintly:

"I have been robbed! Heaven have mercy on me—I saw the face of my assassin—his name is Clifford—George Clifford."

"My God," cried the accused man, as he reeled backward. Poor Blanche fainted, and the children began the most piteous moanings. All this produced the effect of still more fully convincing those around of the guilt of the man before them.

The excitement was now running high, and for a time it seemed evident that Tillman would be summarily dealt with. There could be no doubt of his guilt. On a vessel not far distant lay the body of his victim, and his dying words had denounced his murderer. But Tillman rallied and exclaimed:

"Men, I do not ask you to be generous, but I expect you to be just. This man, from some cause to me unknown, has become my bitter foe. Much, and nearly all that he has said I can disprove. Give me time and I will unravel this whole mystery. I believe that my accuser is the murderer of Mr. Moreland. Will you listen to my story?"

CHAPTER III.

The Husband Talks.

TILLMAN turned to his fainting wife, and raised her from the ground, where she had fallen. He held her in his arms.

Raymond seemed to be very impatient. He began whispering among those whom he had hoped to lead into rash acts. A few words from Tillman had a thrilling effect.

"Friends," he said in a low but well-modulated voice, "for so I will yet call you, I want my dear wife to hear my story. I will soon explain. Conviction must be car-

ried to your hearts. Be patient for a moment. It is my wish, I repeat, that Blanche should hear every word I have to say."

"I will listen," came the faint response of Blanche.

"And believe?"

"Yes, I will believe. You cannot utter a falsehood—you are too noble."

"Bless you—bless you, my wife," he said. Then, addressing those standing near, he continued:

"Now I will give you the secret of my life. I—"

At that moment an old sailor came up from the shore. He glanced around, and in an instant his eyes fell upon Tillman. He doffed his hat and advanced in a respectful manner. Tillman extended his hand, and the name of Pierre Montrosa escaped his lips. The greeting was a cordial one, and the sailor whispered a few words in Tillman's ear. After doing so, he spoke in undertones to Blanche; then turned to fondle the children.

The face of Tillman flushed, and his eyes glowed with a triumphant expression, as he listened to the words of Pierre Montrosa. When they were repeated to Blanche, she appeared to be overcome for an instant, and threw herself on her husband's bosom, crying with joy.

This seemed to be the general impression. There was evidently a great reaction in favor of the accused. Raymond saw this, and he grew uneasy.

A smile rested upon the face of Tillman as he began:

"My father and his family were formerly residents of Madras, British India. For an especial service, my father was knighted by the East Indian Company. He had, however, accumulated great wealth, and sailed for London, where he settled. I sometimes felt that a false pride had taken possession of my parent's heart; but I must not reproach him. His position was not that of a British knight, and this made him, perhaps, more sensitive than he otherwise would have been. I was his only son—his only child. He had forgotten his own early love, and wished his son united to a lady of honor, as termed by the royal courts. The woman designated was penniless, although titled. They called her lady, but in a brief acquaintance with her, I learned more fully to understand the exact significance of that term in Brittany. She had a superior title, but no riches. A paltry pen-

sion was her only means of support. My father had ample wealth, and so he was willing, and even anxious, to sacrifice his boy of twenty, and his estates, for a woman of thirty, with a title which could not sustain itself without gold, which she had not. Is it a wonder that I rebelled?"

"No—no," was the general response.

"He lies!" yelled Raymond.

"Will you hear me through?" asked Clifford.

"Yes—yes—go on."

"Wishing to avoid this hated union, and loathing the society of her my father had pressed on me, I sought seclusion. During my retirement, I formed the acquaintance of Blanche Gorman. She was a poor girl, as my accuser has stated; but I loved her from the first; and it was my wish to make her my wife. I knew that my father would oppose the union.

"One morning the terrible intelligence was conveyed to us that Mr. Gorman had been murdered. The blow fell heavily upon the daughter, but more heavily upon the mother, and she died not long after. Let me ask you, in such a case, what would any one of you have done?"

"Married the girl," was the general response.

"I did do so."

"A false marriage," growled Raymond. Clifford continued:

"The Reverend Joseph Moreland was my friend, and to him I confided all. He advised me to make the orphan my wife at once, and I did so."

"And last night you murdered him!" growled Raymond.

A murmur of disapprobation followed these words; but Tillman did not heed them, and continued:

"My friend, Mr. Moreland, performed the ceremony, and Blanche Gorman became my wife. I knew that I must make sacrifices of wealth and position when this step was taken, but I heeded them not. To live in quiet with her was my highest ambition, for here, and only here, could I find happiness."

An exclamation of approval burst from the lips of the listeners, while Raymond writhed. Clifford went on:

"I know that I acted in a childish manner. I feared my father's curses, and so I kept the matter a secret, living most of the time in seclusion. At length, I was discovered. I had kept the secret of my

noble family from my wife, fearing that the disclosure would compromise her happiness. I had no other motive."

"Heaven bless you, my husband," murmured the wife, as she clung closely to him.

"Well," Tillman continued, "I made Mr. Moreland my arbiter, but my father would not listen to him. Mr. Moreland has always been my friend. At my invitation, he came to visit me, and—"

"And you have murdered him," put in Raymond.

"Let me say a few words in regard to my accuser," said Tillman.

"Do not hear him," cried Raymond.

"Go on, go on!" yelled the crowd.

"I will," said Tillman. "This man was my father's confidential secretary. I did not like him, for he has a repulsive face, but I made an effort to overcome my prejudice. Why he has become so bitter an enemy to me and my family I cannot tell. Surely, my father would never justify him in this persecution."

Raymond pushed forward and said:

"Those here may believe your story, but until you can disprove your deeds of last night, you must still stand convicted as the assassin of the Reverend Joseph Moreland."

"Come with me to the vessel, friends," continued Tillman. "There we will view the dead body."

Raymond offered no resistance.

In a short time the party reached the vessel's deck. The accuser of Tillman started back in horror. Seated in an easy chair, in the sun's warm rays, was an aged and wounded man—still alive, and recovering.

Raymond attempted to escape from the vessel, but he was detained. Then Tillman asked of his old friend:

"Mr. Moreland, could you recognize the face of the man who attempted to murder you last night?"

"I could, my old friend," was the reply.

"Did I do it?"

"No—oh, no!"

Tillman turned to the crowd and said:

"Let no man leave this craft until every one has passed before this wounded man!"

None appeared to shrink—not even Raymond. One after another passed in front of Mr. Moreland, and, at length, Raymond came by. His lips quivered slightly, and he averted his eyes, but the old man grasped him by the arm and cried:

"This is the man!"

Raymond was placed in irons, and important papers found upon him which had been taken from the supposed murdered man. Pierre Montrosa had brought the word to Tillman that Moreland still lived.

CHAPTER IV.

Why He Was Exiled.

"IS that villain, Raymond, in irons?" asked Mr. Moreland.

"He is," returned Tillman, kneeling by his side. Blanche and her little ones were near.

"If I could be merciful," continued the old man, "I should say, let him go, and he would never be happy; but—"

"The law must grasp him."

"Yes. Let the wretch be punished as he deserves."

"This shall be done; but have you strength now to tell me of my own affairs, and why Raymond has become such a bitter foe to me and my family?"

Mr. Moreland began, while many aside from those especially interested crowded around, to hear his words. Three years before Tillman and his wife had been passengers on that same vessel. Several of the sailors had afterward visited him at his cottage home, and among the number was Pierre Montrosa.

Herman Tillman was really George Clifford. He had changed his name, fearing his father's wrath when he married. Now that the inhabitants of Copper-Clad Island knew the truth, he would keep it a secret no longer.

George Clifford—as we shall know him from this on—had been accused of murder. After his pretended discovery of the old man, in the last agonies of death, as Raymond supposed, he hastened to the vessel and told his story, implicating an innocent man. Believing his victim dead, he proceeded to mingle with the inhabitants of the island and circulate the same story, urging them to take immediate vengeance on the assassin.

His object in murdering the old man was apparent. He was aware of the fact, or believed such to be the case, that Mr. Moreland had quite a sum of money in his possession, which he was bringing to young Clifford. He also knew that Moreland had certain documents about him

which would be of advantage to himself. Besides, the old minister who had solemnized the marriage of Clifford and Blanche had made frequent visits to the young people in their exile, and would prove a friend to Clifford, and, perhaps, foil his plan.

All these circumstances rendered his removal desirable to Raymond.

Why did Raymond seek the death of George Clifford?

This conversation took place upon the vessel's deck.

An anxious expression rested upon Clifford's face, as he knelt by the side of his friend. Mr. Moreland began:

"Your father loves you, my boy—"

"Thank God!" exclaimed Clifford.

"Don't raise your hopes too high."

"My father will forgive me?"

"No—he is inexorable."

"Then what have I to hope for?"

"For a long time I have believed that your father would relent. One week ago I visited him. He did not appear in the best of humor, and he would not listen to me. I spoke of your daughters, but he did not soften. I pleaded hard, and finally touched his heart. Turning to me, he said:

"Never will I acknowledge my son and his plebeian wife. When she is dead, tell him to come to me."

Blanche groaned, as she bowed her head on her husband's bosom.

"Do you consider that my father's heart was really touched?" asked Clifford.

"You did not hear me through, boy."

"Go on—I will listen patiently."

"I told your father that you would never part with your wife while she lived, and I did not for a moment believe that you would ever return to the paternal roof, unless the memory of that wife was respected and honored after she was dead."

"You spoke truly."

"Can you imagine what your father's answer was?"

"Let him starve," I suppose."

"You wrong him, boy."

"I do not wish to do so. But what was his reply?"

"It was his reply and his action which nearly cost both you and myself our lives."

"Pray, explain."

"He said that if you would not leave your wife, he would only settle upon you the sum of five hundred pounds a year. He wants you to go to America, and never bring further disgrace upon his name."

"Very kind."

"Then he spoke tenderly of your children."

"What of them?"

"He considers the sum he settled upon you, augmented by your own exertions, as amply sufficient for the support of your family. Should your wife die, you can return to London with the children. Should you die, leaving them only their mother, he does not consider the five hundred as sufficient for their support and education, and the amount will be increased to one thousand pounds."

"That is, indeed, kind of him."

"Raymond was present while your father was speaking, and saw me receive two thousand pounds to be conveyed to you. Then your father named that villain as the guardian of your children and the controller of their yearly income, in the event of your death."

"It is plain now why he sought my life."

"But you do not understand his motive in trying to murder me?"

"Certainly. In the first place, he coveted the money you had in your possession. In the next place, he knew that your friendship for my family would cause you to look into matters, and that he would be detected."

"That is plain. But now tell me, my boy, what plans have you?"

"You tell me that my father has sent me two thousand pounds?"

"Yes."

"Did not Raymond take it from you last night?"

"He did, but it has been recovered."

"My father suggested that I should go to America?"

"He did."

"I will go. At first thought, it seems hard to leave here, but I shall find friends in that country. My small capital will enable me to commence a modest business."

"When will you sail?"

"At once. To-morrow I will leave for Southampton. The first vessel sailing from thence shall carry me and my family to New York."

CHAPTER V.

The Disappearance.

A WEEK later, George Clifford, his wife, and two little daughters, stood upon the deck of the *Tempest*, watching

the shores of England, as they were receding from view. The last farewell word had been spoken. The embarkation had taken place quietly at Southampton. But two friends were there to say good-by—old Mr. Moreland and Pierre Montrosa.

"I'll see you in America, before long!" said Pierre as the ship cast off her moorings. When they were fairly started the wife said:

"George, why did you start and tremble as that aged gentleman upon the wharf came into view, waved his handkerchief and then so suddenly disappeared?"

"It was my father."

"And he would not come and grasp your hand or speak one encouraging word?"

"So it seems. But he shall be proud of me yet."

"There are few in this world who have not cause for sorrow, and ours may really be less than many who seem more happy. If I should speak just as I think, I would say that I am at this moment far happier than my father, with all his wealth and his title. I cannot say that I have much to reproach myself with, and I know that he will not feel the same, when he seriously considers his attitude toward me."

"Do not be too harsh, dear George. Your father has not cast you from his heart, for he has made ample provision for our support."

"Blanche, you are my wife, and you must know that you are all the world to me. Were you a countess, and the possessor of great wealth, and I but a poor titleless man, would you have loved me the same as now?"

"You know, George, it is only one week since I first learned that you were anything but a poor titleless man."

"True. But had it been as I suggest, would you have loved me?"

"As dearly as now."

"I believe it."

The next morning broke clear and beautiful. Thus several days passed. They were nearing the shore of New York, and every one was high in anticipation of a safe arrival.

But as night was coming on, the sky became overcast with clouds. No one expected much trouble. A terrible storm broke over the ship. In a short time the heavens were ablaze, and the bellowing of the elements was terrific.

Yet no one appeared to be alarmed.

Suddenly there was a terrible crash and the mainmast came down upon the deck. Immediately there was great confusion. Soon the cry was raised that the straining of the ship had opened a seam in her bottom, and that she was leaking badly.

All hands were called to the pumps; but the utmost efforts were unavailing; and the vessel was fast settling.

Then a new terror presented itself. Flames began to issue through the hatchway. The lightning had ignited a portion of the cargo. Destruction was inevitable.

(To be continued.)

Rockets were thrown into the air, but no answering signals came.

"Man the life-boats!" shouted the captain.

"Where is my husband?" asked Blanche, as she came on deck. He was not to be found. He had been seen standing by the bulwarks but a moment before the doomed vessel was struck! His name was called in vain! The wild wailing of the distracted wife received no response from him. For a moment her strength appeared to fail.

ELECTRICITY IN CAR VENTILATION.

From a paper by B. W. Stowe, read before the Railway Electrical Engineers

VENTILATION, one of the two effects sought in the employment of electrical equipment on railway cars, implies the removal of foul and stagnant air from passenger-coaches. Such air for our purpose shall include not only such elements as may be detected by the sense of smell, but of microscopic organisms, including disease germs.

Dust and suspended matter may be made up of spores, seeds, pollen, hair cellular tissue, epidermal cells, and other animal substances. These various impurities, mingled with carbon dioxide and watery vapor, products of combustion, are what gives to a room that odor which is so noticeable to one coming in from the outside, and renders the atmosphere close and oppressive.

Few of us realize that the air we breathe is so laden with impurities. It is perhaps best that we remain in ignorance of the fact that even country air contains on an average 200 dust particles per cubic centimeter, and that in city air carries as high as 150,000 particles. Records are extant which the air in tenement-houses reveals 1,000,000 particles per cubic centimeter.

Now, to most of us, it matters not whether the air we breathe is rated in terms of the dust in suspension or the carbon-dioxide content. Endowed with the sense of smell, we are made conscious of abnormal conditions in the air we breathe; can easily distinguish between good and bad odors. By a feeling of oppression and lassitude, oftentimes accompanied by headache and drowsiness, we are to understand that the per cent of carbon dioxide gas in the atmosphere has reached a dangerous point.

The evidences of impure air in a room are re-

vealed in many ways. It is not possible to detect the presence of disease germs, however, and we can only accept the assumption that, if we are conscious of impurities in the air we breathe, germs are undoubtedly present. It then behooves us to consider not the question of infection, but how best to insure a supply of pure air in proportion to the rate at which it becomes vitiated.

Our modern passenger-coaches, otherwise known as "general service cars," seat approximately eighty people. Each adult and normal person requires about 3,000 cubic feet of air per hour. Medical authorities prescribe a clear space of about 600 cubic feet per adult in order to insure an adequate supply of air.

Cars of the above classification contain about 4,800 cubic feet of space, and calculating the cubic feet of air required by eighty persons as 240,000, it is evident that the ideal ventilation of a modern day coach would be accomplished only by some means whereby the *entire air content would be changed fifty times per hour or nearly once every minute.*

Furthermore, if we care to continue our search for the ideal and in the light of medical requirements, we will find in order to vouchsafe to each occupant of such cars his allotment of 600 cubic feet of space, that the capacity of each car would be limited to eight passengers. But such considerations have no place in modern railroad practice. Indeed, the traveling public demands no very strict observance of the laws of health, if such laws are to be interpreted as above. The foregoing analysis is of value only in showing how far short of nature's requirements does modern practice obtain.

Despatching Trains by Telephone.

BY JOHN C. THOMSON.

IN the July number of THE RAILROAD MAN'S MAGAZINE, we reprinted a short item from an eminent contemporary, *The Railway and Engineering Review*, which stated in part: "One of the most important innovations which has taken place in the history of railroading is that being put into effect now by many of the railroads throughout the country, namely, a new method of despatching trains. The telephone is gradually replacing the telegraph for this service on many of the big railroad systems in the United States."

This item, which we published only as an interesting bit of news—and it is our province, truly, to record for the benefit of our readers all important matters relating to railroad service—brought forth a storm of abuse from telegraph operators in all parts of the country. These writers claimed that the item was false, that the telephone was installed to take the place of the telegraph for sinister motives only, and we were blamed for publishing "trash."

Fearing that we might be in the wrong, we commissioned an absolutely unbiased writer to fully investigate the matter. The facts of his investigation are set forth in this article. The authorities which Mr. Thomson plentifully quotes are men whose statements cannot be doubted.

At any rate, we beg to inform the great army of telegraph operators that if they fear that the telephone will eventually obliterate them—they, alone, hold this view. The telephone will have its place in *train despatching* for many good reasons, but it will no more displace the telegraph than—as the mail clerks declared forty years ago when the telegraph came into being—the United States mail would go out of existence.

Why the Telephone Has Replaced the Telegraph for the Despatching of Trains on Fifty-Five American Railroads, Exceeding 29,000 Miles.

The Opinions of Experts on this New Departure.



WITHIN the past three years the telephone has replaced the telegraph for train-despatching and other purposes on over fifty-five American

phone will eventually replace the telegraph. This prediction, however, is disputed by many telegraph operators. But the railroads declare that the telephone is coming into service with more speed than was first imagined.

railroads, whose combined mileage exceeds 29,000 miles. The movement seems to be growing rapidly; so much so, in fact, that many railroad men predict that the tele-

The Western Electric Company, which has installed over ninety-three per cent of all the railroad telephones—especially those used for despatching—gives the three

following reasons for the rapid introduction of the telephone:

First, and most important, was the enactment of State and Federal laws limiting the working day of railroad employees transmitting or receiving orders pertaining to the movement of trains, to nine hours.

The second reason, which is directly dependent upon the first, was the inability of the railroads to obtain the additional number of telegraph operators which were required under the provisions of the new laws. It was estimated that fifteen thousand additional operators would be required to maintain service in the same fashion in 1907, after the new laws went into effect. The increased expense occasioned by the employment of these additional operators was estimated at approximately ten million dollars per year.

A third reason for the introduction of the telephone is the decreased efficiency of the average railway and commercial telegraph operator. There is a very general complaint among the railroads to-day regarding this particular point, and many of them welcome the telephone for the sole reason that it renders them independent of the telegrapher. What has occasioned this it is not easy to say, but there is a strong tendency to lay this decreased efficiency to the attitude of the telegraphers' organization toward the student operator. It is a fact, too, that the limits which these organizations have placed on student operators was directly responsible for the lack of available men when they were needed.

The above reasons may or may not be so, and are much in dispute, especially as the telegraph operators practically deny all three of them.

A fourth reason advanced by the railroads in general, and vigorously denied by the telegraphers, is that the use of the telephone in despatching means greater safety. For instance, in May, 1909, at Atlanta, Georgia, before a meeting of telegraphers, President Perham of the Order of Railroad Telegraphers read a paper, attacking the use of the telephone for railroad work, and train-despatching in particular. In answer to this, C. H. Gaunt, assistant general manager and superintendent of telegraph for the Santa Fe, says in a letter:

The Santa Fe's Claims.

Telephone despatching has been in no way responsible for any accident in any territory so equipped. I may add further that in no instance have we gone back to the telegraph despatching after once starting the telephone

circuit, except, of course, temporarily, for very short periods of time during wire troubles on the telephone pair.

In an article in the *Railroad Age-Gazette*, "Telephone Train-Despatching on the Santa Fe," it is claimed that: —

The telephonic transmission of the line of the greatest length, Fresno to San Francisco and branches, 203.1 miles, with 32 stations bridged across the line, leaves practically nothing to be desired, either in volume of sound or clearness of articulation. The line failures, by superior construction, have been reduced to a minimum, and the curious fact has developed that during heavy fogs in the San Francisco Bay vicinity it is possible successfully to operate the telephone circuits after line-escapes, due to moisture, have rendered the telegraph wires partially inoperative.

The Santa Fe now has over 2,000 miles of road under telephone instead of telegraph, and are constantly adding to the new service.

Some railroads, in fact, even advertise in the daily papers that the use of the telephone for train-handling is a factor of safety and bid for passengers on this basis. The Lehigh Valley, for instance, has it:

Safety, speed, and comfort. The telephone superseding the telegraph. A perfect system made even more perfect, irrespective of expense, by the gradual introduction of the telephone in place of the telegraph for train-despatching.

A Time Saver.

The following letter sums up as compactly as is verbally practical the views of Chief Despatcher H. McPhee, of the Santa Fe. It is dated April 3, 1909:

I attach herewith letters from Night Chief Despatcher Messick and Despatchers Baker, Lindsey, Moore, and Extra Despatcher Patterson, who have handled trains by telephone. You will notice that they all agree that the method of handling trains by telephone is vastly superior to the old method of handling them by telegraph.

(1) The telephonic has done away entirely with the loss and waste of train-despatchers' time calling operators, which time can now be put to good advantage in keeping up the train-sheet, calculating ahead, and tends to better handling of train movement from the fact that the train-despatcher has more time at his disposal in which to arrange for the meeting and passing points. This feature also secures to the despatcher the placing of

the orders to the trains at the time he originally outlines and figured on by him. Under the old method or plan, if for any reason it would be necessary for a despatcher to spend ten, fifteen, or more minutes endeavoring to raise some certain office, the despatcher of a necessity would be crowded for valuable time, which would always result in bringing him face to face with a congestion of train orders to handle; in other words, the despatcher would want to issue two or three orders at the same time on account of his work being delayed by failure to raise an operator. So far the experience with the telephone has shown that this feature has been eliminated.

(2) I believe that there is no argument between the two methods as to safety. The telephone is perfectly clear and reliable, and with the instructions pertaining to the handling of train orders and checking, there should be no loophole for an error, and in case one might be made there is no reason why it should not be more easily detected than with the telegraph.

No claim is being made that the actual transmission and repeating of train orders is being handled quicker on the telephone than by telegraph, but the officers to which the orders are to be sent or handled are assembled without loss of time, which is a decided advantage over the telegraph.

For Trick Despatchers.

There is one feature of the handling of train orders under the telephone that should recommend itself to every trick despatcher, as well as the railroad company, and that is that the train-despatcher now places in his record-book a copy of the order as he transmits it instead of waiting for the first station to repeat it and take chances of his memory verifying the order as being the same as was sent by him.

(3) Under the old method, when a train-despatcher would have a great number of orders to issue and repeat, "OS" reports or time of trains at stations would be neglected, and a great deal of delay would ensue raising offices and requesting this information. With the telephone you can get this information as quickly as the selector will ring up.

(4) Under the telegraph system it was formerly quite a task to secure within a reasonable length of time any satisfactory information in case of derailment or other trouble. With the telephone the entire situation is covered in a few moments' time by getting the conductor or party who would be in touch with the situation, to advise just what this might be. Any point that would not be covered could be requested, while under the old method message after message used to be sent before results could be obtained.

The advantages of train-despatching by telephone are too numerous to enumerate, and despatchers feel that we would be going "back to the light of other days" if we had to go back to transmitting our orders by telegraph. The despatchers are getting hearty cooperation from all operators and agents, and we are having success with the system. There has been, of course, some wire troubles and minor defects, all of which have been eliminated, and at the present time I would say that the telephone is working as perfectly in its way as did the old telegraph instruments, and have no doubt that if the improvement will be as marked in the future as it has been in the past two months, the system will be entirely perfect in a very short time.

H. MCPHEE,
Chief Despatcher.

H. C. Roehrig, another Santa Fe despatcher, in a signed letter to his chief despatchers, says that the most important advantage is the calling of operators who may be outside working local trains or handling freight in the freight-house, which is almost impossible by telegraph. Operators respond quickly and act quickly in giving instructions.

There are no student operators, as some of our weakest men, telegraphically speaking, are strong on the phone. Ability to converse directly with the conductor or engineer when desired. The making of a record of messages while sending them. In conversation the phone is much faster than the telegraph.

Tell of Reduced Strain.

W. R. Harkness, of the Western Electric Company, in a paper read before the St. Louis Railway Club, said that it will be contended by many that the telegraph operator does his work unconsciously, and is, therefore, not subject to a mental strain. But the despatchers and operators who have been using the telephone for despatching work in nearly every case speak of reduced strain.

"They can do the same amount of work by telephone in one-half the time formerly required. The abandonment of the telegraph-key for calling the stations has been a great physical relief to the despatchers, and the operators have been relieved of all calling of the despatcher.

"The stations answer the signal given by the selector-bell much more promptly than they do the sounder. The fact that the

noise of the telegraph instruments is removed will also have an effect upon the work of the despatchers and operators.

"The calling of stations by the despatcher while conversation is being carried on with other stations saves time. There is greater accuracy in transmitting orders by telephone, as the despatcher writes down each word as it is spoken instead of sending it from memory by telegraph.

"The improved line construction and telephone-apparatus available to-day is far superior to that used even five years ago. It has been stated that all voices are not transmitted equally well by telephone.

"This is true; but trouble from this cause is seldom experienced, and it will be possible to obtain employees with suitable voices easier than it is to get employees who can send good Morse.

"The telegraph operator is subject to paralysis of the arm. There is not such effect or any other physical trouble caused by the continual use of the telephone, and its introduction enables many telegraph operators already affected with paralysis, but otherwise efficient employees, to continue to carry on their work in a satisfactory manner.

Better for Oprs.

"The despatchers and the operators have become better acquainted since using the telephone, and this has resulted in closer co-operation in the performance of their work. The fact that they are talking with each other seems to have eliminated the caustic remarks and comments so frequently sent by telegraph.

"The remark of the despatcher after using the telephone for several months to the effect that he 'had not been mad once since using the telephone' is well worth repeating, as it indicates an improved condition. By equipping trains with portable telephone sets the despatcher may be reached from any point between stations in case of break-down."

Mr. Harkness, in speaking of some of the advantages and disadvantages of the telephone, as compared with the telegraph, has said: "The telephone messages are handled at less expense than by telegraph. The telephone operators handle as high as four hundred and fifty messages a day, and this could be increased if the line were not used so much for conversations.

"For train-despatching service due con-

sideration must be given to the length of the line, the kind and size of wire, the number of stations connected to the line, the kind of telephone, transmitter, receiver, induction-coil and circuit, together with the kind and amount of current supplied," says Mr. Harkness. "The number of stations connected to lines now in service varies from ten to forty-four.

"In regular commercial telephone service there are usually but two people talking or listening on the line at the same time, while in despatching service it is customary to have from three to five operators in addition to the despatcher, all connected to the line at the same time, and in addition an unknown number of other stations listening to their conversation.

There Is No Standard.

"Various methods of rendering efficient service under these severe conditions have been proposed and tried. Some have attempted to equalize the telephonic current passing through the receivers at the various stations, others have increased the volume of transmission, and still others by a combination of the two have attempted to secure more satisfactory results.

"In some cases increased volume of transmission has been accomplished at an increase in battery consumption and a decrease in clearness of articulation. In others the volume of transmission has been decreased to obtain clearer articulation.

"The great difficulty is that there is no standard. No two users of a telephone will agree as to the relative volume of articulation obtained on two different circuits. Even with skilled observers, differences in volume of transmission are often taken for differences in quality of articulation and vice versa, or the amount of difference when judged in per cent will vary within a wide range. A comparison of a laboratory standard and a working line is a physical impossibility if the tests are to be made by the same parties and under the same conditions.

Will Not Supersede Telegraphy.

"Comparisons made by observing the service on one line, and then several days later observing the service on the same or different line cannot be considered fair. Further, changes in atmospheric or physical conditions may occur in an instant."

Mr. Harkness estimates the cost of equipping a railroad with telephones at about one hundred dollars per mile.

G. W. Dailey, superintendent of telegraph of the Chicago and Northwestern, in the *Railroad Age-Gazette* for October 9, 1908, contributes a long article, in which he gives minute details of the experience of his road with the telephone. Although Mr. Dailey reports very favorably of the telephone for railroad work, he says that "there is an erroneous impression that the telephone may soon supersede and replace the telegraph entirely. This will not happen in your time or mine. On the two districts equipped, while we are using the telephone for train-movement business, we have retained the telegraph for ordinary messages and commercial business."

For years the telephone has filled a minor but nevertheless important place in the communication system of the Chicago and Northwestern, as well as other roads. Its principal uses in the past have been in connecting up outlying switches with the telegraph offices, small stations with the telegraph stations, connecting roundhouses and coal-sheds, and in the larger yards connecting various switch-shanties, scales, ice-houses, and roundhouses with the yardmaster's office. The Chicago terminal has been a good illustration of the service.

This yard system has proved of untold value in handling the terminal business, and could not now be dispensed with. The same system on a smaller scale has been in use in Clinton, Boone, and other yards of the Chicago and Northwestern for several years.

The Errors Are Few.

Many important instructions are issued by the Chicago and Northwestern operators, and hundreds of car numbers and initials are handled over these yard telephone lines every day. The errors and misunderstandings have been so few, and the operation of these yard lines so successful, that it had quite a bearing on the proposed extending of the telephone on that road.

It also served to demonstrate the superiority of the telephone, due to its greater speed and flexibility, as well as to the fact that any yardmaster, yard-clerk, or ordinary employee can use it to equal advantage and does not have to look for a telegrapher to do his talking for him.

In handling train-orders by telephone

7 R R

on the Chicago and Northwestern, all rules and regulations governing train movements remain the same as under the telegraph. No rules or practises have been changed.

The orders as delivered to conductors and engineers are just the same in form, appearance, and every particular as they have been, and are handled exactly the same as heretofore. In issuing a train-order, the despatcher, after calling the stations he wants, proceeds with his order in the same form and formula as if by telegraph.

The names of all stations, conductors, train and engine numbers, and the time are first pronounced plainly, then spelled out letter by letter and the figures duplicated, naming each figure separately.

When speaking the order, the despatcher is writing it in his record-book, which is considered quite a material safeguard over the telegraph practise.

Type of Telephone Orders.

When he has finished speaking and writing, he is ready for the repeating by the operators. This reduces his speed of conversation to his own ability to write it down, and also gages the speed for the receiving operator out on the line, and does not unnecessarily hurry him. The operators repeat the orders back to the despatcher in the same way, giving the "X" acknowledgment, as heretofore.

All operators listen to each other, thereby checking each other. The despatcher underscores each word and figure in his record-book as it is being repeated by each operator.

Following are two illustrations of telephone orders. The hyphenated words and figures are spelled out letter by letter. The orders as delivered do not show these spacings or brackets, which are merely used for this illustration:

EXAMPLE I.

Order No: 49.

To C. and E. No. F-i-f-t-y F-i-v-e (Five Five):

Extra E-l-e-v-e-n S-i-x-t-y S-i-x (Double One Double Six) and No. F-i-f-t-y F-i-v-e (Five Five) Engine S-e-v-e-n (Seven) J-o-n-e-s will meet at Bombay (B-o-m-b-a-y) instead of at Bangor (B-a-n-g-o-r).

EXAMPLE II.

No. T-w-e-n-t-y T-w-o (Double Two)

Engine S-e-v-e-n-t-y S-e-v-e-n (Double Seven) S-m-i-t-h will meet No. T-h-i-r-t-y F-i-v-e (Three Five) J-o-n-e-s at Bangor (B-a-n-g-o-r).

In reporting trains to a despatcher, it is claimed that no calling is necessary—operators merely take receiver off the hook, speak the name of their station, and go ahead with their business; the despatcher, being cut in continuously, hears them, gives his acknowledgment, and the transaction is completed.

Quicker Handling Claimed.

The despatcher writes his order in his record-book as he speaks it, and so is all ready for the repeat when he is through speaking. The operators can then talk it back to him as fast as they can do so distinctly and plainly.

It is claimed that, counting the time saved in calling and quicker repetitions, the result is that orders and "3s" are handled about fifty per cent quicker than by telegraph.

This means that the despatcher can dispose of his work that much faster, has more time to figure out movements and meeting-points, and can handle a great many more trains on his trick and handle them more promptly, thereby greatly facilitating train movements.

Several railroads claim that it further places the despatcher in closer touch with all the little details of his daily work, and in closer touch with his men out on the line.

The Chicago and Northwestern has observed that there has been a decided improvement in the work and deportment of the men out on the line, due to the fact that the conversation between the despatchers, operators, and other employees are of a much more personal character than when obtained by telegraph, resulting in closer working relations and more pleasant cooperation.

Talking vs. Writing.

It is more as if they were facing each other, and they don't feel like indulging in some of the choice remarks that used to fly over the telegraph wire when some one would lose his temper.

It is human nature not to feel quite so brave when one is talking directly to you.

The Chicago and Northwestern states that it has had instances where derailments or other accidents have occurred, and, the despatcher being able to converse directly with the conductor on the ground and the conductor being able to explain things in his own way, more has been accomplished in ten minutes than could have been done by telegraph in an hour under the same conditions.

Many a first-class railroad man, like many other mortals, can talk better than he can write. The telephone permits him to talk, while the telegraph forces him to write.

On the Chicago and Northwestern each superintendent has a telephone on his desk connected with the despatching line. He can listen in, or talk with any or all of his stations at any time. He can himself check up any slackness and keep in close personal touch with everything, which is not otherwise possible, unless the superintendent is a telegrapher, and this is not always the case.

There is a worthy and charitable side to the telephone in railroading. It has opened up an avenue of employment for injured railroad men who make first-class block-operators or station-agents.

It should likewise open up a future avenue for young conductors to become train-despatchers should they so desire. There are many young conductors who ought to make first-class train-despatchers, and under telephone operation it would be a comparatively easy matter for them to do so, as they usually have the necessary experience and all the requirements, except the ability to telegraph.

Lightening Burdens.

The train-despatchers, according to all reports that the writer of this article has received, are all enthusiastic over the telephone, as it lightens their many burdens to a considerable extent, and we all know they have burdens enough to carry.

The Chicago and Northwestern states that another important feature in the use of the telephone for train-despatching is the fact that it works as good, if not better, in bad or foggy weather. This is just the reverse of the telegraph. No instruments out of adjustment and no operator breaking in the middle of an order, with a string of dots like a Gatling gun, trying to adjust

himself. The telephone remains in adjustment in any kind of weather; the signaling apparatus may be affected, but the telephone will not be.

Says Mr. Dailey:

"The telephone is decidedly a step in advance in the method of handling trains. More trains can be handled in a given time, prompter movements can be made, emergencies handled and controlled quicker and better, everybody is placed in closer touch with each other, and it is just as safe as the telegraph, if not safer, for such purposes.

"When telegraph orders were first introduced the first train and engine men handling them were afraid of them, and did not want to use them. Now we would not be without them."

Although the officials of only a few roads have been quoted in this article, there are, as has been said before, over fifty-five American railroads using the telephone for despatching trains over a mileage of 29,000 miles and more. The Santa Fe to-day is said to have the largest mileage under telephone, and is rapidly putting the whole system under such control. It is understood that the whole Harriman system is doing the same thing.

The Telegraph's Uses.

The Pennsylvania and the New York Central have found the telephone so useful for despatching that its use is being extended as rapidly as possible on these great systems. In fact, it looks as if despatching trains by telephone will in a very few years be the universal practise of this country and of Canada.

It will be noted that I say "despatching trains by telephone." This does not mean that the telegraph is doomed, for there are many other uses for the telegraph besides despatching, and as Mr. Dailey says, there is an erroneous impression that the telephone may soon supersede and replace the telegraph entirely (but) this will not happen in your time or mine."

Take the Associated Press reports, for instance. As any newspaper man knows, the telegraph is in no danger of being replaced by the telephone in such service, and especially by the ordinary commercial telephone. Any newspaper man who has had to take news by telephone or handle it as laid down on the desk by telegraph will not

worry much about the future of the telegraph, or about the telegraph operator's job.

Train despatching is only a small part of communicating by wire and electricity. The cheapness and reliability of the telegraph makes it a standby where the telephone so far is not practical.

Value of New Things.

The telephone is to the telegraph, even in railroad work, what the electric car is to the steam locomotive. The trolley-car has not put the locomotive out of business, and the telephone cannot put the telegraph out of business.

Every change in machinery raises a misguided protest from the misinformed. It was so when the metal plowshares superseded the forked stick down to the time when the repeating rifle made the muzzle loader useless.

The introduction of the locomotive has increased the demand for horses, the telegraph has increased the demand on the mail service, and a telegraph operator worrying over the introduction of the telephone in railroad work is much like a mail clerk in the last century saying good-by to his job because of "that new-fangled, dangerous, unreliable affair, the telegraph, that nobody ever used before."

The telephone in railroad despatching, according to the reports given to the writer by various railroads, has the following in its favor over telegraphing:

- (1) It is faster by from 25 to 50 per cent.
- (2) It is fully as safe if not safer than telegraphing.
- (3) It opens a channel to railroad employees injured in other lines of work who without the telephone could not earn a living.
- (4) It enables a train to communicate with the despatcher from between stations, which is an invaluable thing in a wreck.
- (5) It enables any one to send information in an emergency to the despatcher, or to take the station agent's place temporarily; say, in case of sudden sickness at a remote point.
- (6) It prevents any combination of men from limiting the supply of labor that is necessary with which to run a railroad, and tends to remove the liability of strikes.
- (7) It is extending the usefulness of a great invention, and advances the world one more step.

THAT NIGHT WITH MITZLER.

BY ROBERT FULKERSON HOFFMAN.

An Unexpected Demand by the Call-Boy and What It Did for a Boomer Fireman.

MITZLER was drunk—tired, nasty, fighting drunk. There was no denying that; and, on the other hand, nobody reported it to division headquarters.

Why? There are several reasons, but chiefly two in particular.

If a homeless man battles his way over a hundred-mile division, sweating and blistering close back of a locomotive fire-door; if he doggedly heaves half a car-load of soft coal from the tender into the fierce-flaming fire-box with skill and exactness while the engine-deck careens drunkenly under his tired feet; if his seared eyes search unflinchingly betimes into the blackness of the night, that he may not fail to call to his watchful mate across the cab "white" when the semaphore says "white," or "green" when it says "green," or "red" when it says commandingly "red"; and if, with all this and the multitude of unnamed, soul-searing things which fill the moments of a heavy run with freight, he is patient, even cheerful, he will have won his first degree in the freemasonry which is the railroad man's most jealous possession.

That is one reason why Mitzler was not reported.

The other chief reason is this: When a man has done all of these things in a day, and done them well, no seasoned man of decent instincts will say that it is not enough; and, when the sudden demand is made for more, no man who rightly bears the name goes far aside to bear a tale against the man who, for the once, found erring, falls a little short.

This is true, though fellow-feeling must not override a rule, and whisky always must remain taboo upon the rail.

Nobody was more bitterly aware of this than Mitzler. Whisky had made him a boomer and a tramp before he had drifted into the clear upper air of Pelaya. Again and again he had stood unsteadily gripping the hand-railing in front of the call-board in some roundhouse of the crowded lines of the Middle West and stared shamefacedly through bloodshot eyes while his name was wiped finally from the board.

Again and again he had gone out to dwell in the gutters and the filth of things until, summoning the latent manhood and the saving laughter which were in his heart and would not yet consent to die, he stood up, shook free of the deadly thing, and won his insistent way to another berth a little farther on, notwithstanding the ominous gaps in his "clearance" which would have barred a man less prepossessing.

In one of these reconstructive periods he had drifted into the high country beyond the great plains. In the summer night that brought him to the base of the mountains he lay prone upon his back in the bottom of an empty coal car, while the wheels drummed out their dull, funereal march on the lonely bridge across Purgatory River.

The roar of the engine toiling ceaselessly at the front came back to him through the narrowing gorge. The gurgling waters of the river seemed briefly to voice the mute accusation of the bright stars above him, and the insistent voice of the laboring engine became a thunderous denunciation of his wasted days.

Mitzler was feeling very much alone and ashamed.

Then, while the train wound slowly upward through the turnings of the pass, great banks of cloud welled up above the moun-

tain-tops and slowly blotted out the accusing stars; the voice of the babbling river was hushed in the distance below, and the shouted reproach from the engine was dulled and hushed in the depths of the gorge, while Mitzler fell into the troubled sleep of the outcast on the wing.

When he awoke late in that summer night the train was standing in the dense darkness of Pelaya yards. Great drops of rain were falling on his face and striking dully in the coal-dust on the car floor. He clambered over the side, made his stumbling way across the network of tracks, and presently stood in the middle of the

way out into the night and toward the low rampart of cliff which stands close guard above the town.

When he had gained a sheltered place beneath the beetling rocks he sat down and listened to the rumbling of the storm gathering closer in the mountains. Suddenly it broke and fell about his retreat in sheets and columns of rain, shot through and glaringly illumined by lightning flashes of vivid white and nearer gleams of blinding flame.

The mountainside sprang into quick life with rills and little hurrying torrents. A rattlesnake, drowned out of its den, glided



"THERE IT IS ON THE CLOCK. WHAT'S THE MATTER?" REPLIED THE WAITER.

only lighted room that fronted Pelaya's main street.

He clutched in the depths of his ragged jeans, the last two-bit piece that he possessed, and halted waveringly for a moment between pungent-smelling bar on the one hand and appetizing lunch-counter on the other.

The lure of food prevailed. He fiercely thrust the bit of silver on the counter, and ate to the limit of its purchasing power. He walked to the door and looked across toward the lights flitting about the round-house. He turned back and surveyed his grimy and bedraggled appearance in the mirror above the bar. Then he took his

suddenly out upon the dry ledge where Mitzler sat. He sprang to his feet, and, as it writhed toward him, and before it could coil and strike, he kicked it far out from the ledge, and saw its yellow, writhing folds fall swiftly through a glare of light into the depths.

"That does for you!" he muttered as he sank back upon the rock, shaken with the horror of the thing. "This town must have heard about me, judgin' by the celebration it's puttin' up!"

"That's what I'll do," he declared aloud, amid the rumbling of thunders among the rocks. His eyes followed the course of the rattlesnake's flight. "I'll

kick loose from the whole boomer business and clean up!"

He rose with a determined start. He pressed out the dents from his battered hat, loosed his shoes, and, divesting himself of his garments one by one until he stood naked, thrashed the grime of many wanderings from them upon the rock walls of his shelter. Then he stepped out into the torrent of falling rain and completed his regeneration before he laid down to sleep and await the coming of morning.

That was the real coming of Mitzler to Pelaya. Nobody but himself knew anything more about that than they knew about the deadly, secret battle which he fought for the mastery of himself in the months that followed.

He won steadily from the morning after the storm, when he went into the master mechanic's office, smiling above the insistent demands of an empty stomach, and secured a place on the call-board, until that wild-eyed winter night when he came on the engine drunk and showed a private Pelaya audience a different sort of Mitzler.

That was the one night when Mitzler was undeniably drunk, and, indeed, the only time in Pelaya that there was any possibility of his being so. Until then he had not again touched the stuff which he wanted and feared with all his soul.

It was Christmas Eve, with the sun gone down and the keen upper air nipping and searing every exposed thing in the early darkness.

The yards were a dirty brown of trampled snow, and, beyond and above, the spotless white of the vast slopes led steeply, dimly upward to the circling mountain-heads. The myriad stars were again holding high conclave, but among their brilliant company there was no accusing eye for Mitzler.

There seemed to him, instead, a sort of benediction which found material expression in the resonant voice of big Jim Mahalie as they crossed the yards together, homeward bound.

"Once more we fought 'em through the hills, eh, Mitzler?" said Mahalie with a triumphant glance toward the headless train of freight stretching dimly away into the night, where they had just left it.

"Once more," replied Mitzler briefly.

"Nine hours' fight, with the battle front stretched through snow-banks from Del Sur to Pelaya and seven hundred tons a

coming! Any man that wants more than that is a glutton. What!" Mahalie ran on cheerily. "It's enough, ain't it?"

"Enough," agreed Mitzler, with an abstracted smile.

"Matter, old man?" demanded Mahalie. "Ain't going to turn blue for Christmas, are you? Say," he added quickly, as he read something of the rightness of his guess in a swift glance at the fireman's face, "you're to come up to my house for Christmas dinner to-morrow. It's the last thing my wife said to me when we started out on the run.

"Come up and help play with the young ones. We'll have more fun than you could dump out of a cart," he finished while shifting various mysterious bundles under his arms.

"All right. Much obliged," replied Mitzler, with a lonesome sort of laugh. "That'll be the finest ever. Guess I'm some tired to-night, but you can look for me, fresh as spring grass, to-morrow."

Then Mahalie went his eager homeward way. Mitzler, with a quiet "Good night," betook himself rather pensively to a lonely supper in the only place that always showed a welcoming light in any hour of Pelaya's darkest night.

He pushed the door open, and entered, responding quietly to a varied greeting. He had no mood for companionship. The pride of the six months of his regeneration had slipped away for the moment. He had come suddenly to that partial collapse of spirit which sometimes falls upon an over-wearied man who permits himself to look backward to a somber past.

He was, at heart, again the derelict, the friendless outcast, the bleak loneliness of whose condition stood forth within himself only the more clearly because of the attempted good cheer of Mahalie's making and the good-fellowship-around him.

He observed all of the unwritten niceties of the place quite exactly by hanging his cap upon a hook in the wall and placing his rolled overalls under the chair when he seated himself at a table apart from the hilarious group at the bar and the quieter line at the lunch-counter.

He ate heartily of the substantial meal which was served him, glancing furtively now and then toward the glistening array of bottles back of the bar, which in the months past he had taken a savage joy in regarding as beaten foes.

He gulped the last of his muddy coffee, and groped aimlessly with one hand under his chair in search of his bundled overalls. Then he suddenly loosed his hold of them and sat bolt upright.

"What does it matter?" he ground out through his clenched teeth. "There ain't a soul north of Georgia nor west of the

of Bourbon. Hurry!" he ordered, with a blaze of light in his eyes which admitted of no denial.

When it had come — when José, overfriendly, had volunteered his glib admonition of, "Go to it, bo — there ain't a headache in a bar'l of it!" Mitzler poured a measure of it in a glass and held it gloatingly to the light.

He reveled in the golden gleam of its amber fire, and set it down and poured an added depth before he raised it hungrily to his lips.

He drained it at a gulp, and poured again and drank. Then he seized his bundle, paid his score, and strode to



"SIGN RIGHT HERE
UNDER 'COON'
CONNOR."

Missouri that cares a peck of Chilli-cothe gravel whether I'm corned or sober! I'll take one, and go to bed!

"Say!" he called imperatively to a passing waiter.

But when the man lined up beside him with his hand dropped familiarly upon his shoulder, Mitzler only reached again toward his overalls, and asked lamely:

"What time is it?"

"There it is on the clock. What's the matter? Watch stopped?" replied the waiter as he hurried away with a grin.

The odor of mixed drinks swirled about Mitzler in the wake of the waiter's hurried going. The shining array of bottles glistened invitingly, and the musical tinkle of glasses mingled with many-keyed laughter close at hand.

He thrust the bundle back to its place beneath his chair, and called again:

"José! Bring me an unbroken bottle

the door, with no word of greeting or farewell to any who passed.

He swung the door wide, and bumped full into the call-boy's swinging lantern.

"Whoap!" exclaimed the boy. "You're called. Sign right here under 'Coon' Connor. You're goin' with him on extra 939, west!"

"Yes, I am!" rejoined Mitzler, staring blankly. "Get out!" he added, roughly shoving the boy aside. "I'm just in. I'm going to bed."

"Sign," snarled the call-boy, lunging

back with his book. "You got to sign or git turned in. What's the use hollering?"

"Shut the door!" yelled somebody as the icy blast smote the revelers at the bar. "D'ye think it's summer?"

Mitzler signed, and turned his face to the steady, bitter wind that swept across the tracks, while the clear, sleepless stars blinked gravely on his halting footsteps through the yards.

"Coon" Connor, engineer, had two hobbies, and he was there with both of them when Mitzler arrived at the engine, already coupled to its train.

First, he wore, from October to May, a close-fitting skull-cap of yellow-gray sable, which rumor avowed had been made by himself from some old furs of his wife's. Coon never made any declaration about it, except that it brought him luck. He would run a minute late leaving any station to tell that.

Second, he believed that sheep's tallow was a sure cure for hot pins, and he religiously carried a carefully wrapped pound of it to and from the engine.

He was stowing the sheep's tallow exactly in the right place in the tender toolbox when Mitzler climbed up the gangway. When he had fixed it to his satisfaction, he drew his sable cap down more deeply over his ears, and essayed to be cheerful. But Mitzler would not have it so.

"So you're the engineer, eh?" he demanded. "Great big engineer!"

"Sure," replied Connor cheerfully. "Why wouldn't I be?"

"Well, le'me have a look at this 'gine. I want to put her in my pocket," sneered Mitzler. "Don't get in the way, fellow; I'm goin' to put some of a fire in this machine. Just watch me!"

Connor watched him for the space of three pulse-beats, and understood. It was becoming rare, but he had seen a man quickly turn drunk on a short call in the high country.

He knew the signs, and therefore dropped down and went quietly about his oiling.

In a little while the whistle sent its starting call screeching and rasping up among the ice-locked peaks, and they were away

for the long battle with the hills on the weary way of Mitzler's recent coming. Sullenly, but well, he fought his fight with the fire, and patiently Connor bore with his bitter-tongued question or reply.

Had the night been worn a little farther on the heavy labors of the run, it might have fared easier for Mitzler, but the climax came too soon. He was still heady with the Bourbon which he had taken when they arrived at the first lone water-tank, secluded in its rough-hewn niche beside a ledge of shelving rock.

In the great



"YOU SURE DO WIN IF I CAN HELP YOU."

white silence of the Christmas peace that had stolen upon the world while they had fought their way thus far among the beetling crags and the starved wild things that prowled hungrily among them, Connor stopped there for water. On the one side was the tank standing darkly against the rock wall; on the other side the bench of snow-covered rock at the level of the cab window.

Mitzler sprang from his seat at the window as the engine stopped him directly beside the sloping rock.

His eyes were staring for want of sleep, but there was a terror in them also which was not born of that.

"Hey! Did you see that?" he yelled at Connor's back.

"See what?" replied Connor, drawing in his sable-clad head from the window.

Then Mitzler's eyes widened in a greater fright as he sprang back with a smothered cry upon the seat-box from which he had hastily come.

"That's a shine hat for a white man to wear," he announced, while he fumbled nervously with the shaker-bar, caught up in his leap. "I can see hats like that any place I look. Seen one out here on the snow just now, and I s'pose the woods is full of them. Why don't you get a bear-skin while you're at it, huh?"

"That'll be all about that hat, pardner," answered Connor, touched to the quick. "If you don't like it, you can always get off and walk, you know. Take water, and never mind me, will you?"

"Yes, I'll take water, and I'll be right with her as long as you can pull that throttle out of the back door," replied Mitzler. "Don't you never worry none about me, *hombre!*"

Connor caught up his oil-cans without further ado, lifted the lid of the tender tool-box, took out the precious packet of tallow, and went below with it under his arm while the swirling wind wafted the rancid smell of it across the cab and out over the snow of the rock-shelf.

Mitzler allowed the shaker-bar to slip easily back to its place on the deck. He slipped down quickly after it, and, stepping across the lap-sheet and through the opened coal-gates, began climbing through the loose coal toward the back of the tender. He had gained only half the height of the hopper when he stopped and said:

"Oh, you're up there, are you? Thought

you went down to oil around. You goin' to take water?"

There was no answer but the whistling of the wind among the rock pines.

"Say, why don't you answer? Will you take it, or won't you?" he demanded.

Then two close-set gleams of greenish fire seemed to shoot out from under what he thought was Connor's cap, and a screeching, smothered growl was wafted down to him on a swirl of wind.

He began backing numbly through the mass of yielding coal under his feet, clutching automatically behind him for the shaker-bar, which, though uppermost in his mind, was all too far away.

Just when he had reached the lap-sheet without turning, Connor's yellow-gray head appeared low at the gangway as he shouted up through the cold blast:

"What you yelling about, Mitzler? Was that you made that noise?"

At sight of the cap below him, Mitzler let out an inarticulate yell of sheer terror, and, as the odor of the open tallow-packet in Connor's hands was wafted up more strongly than ever from below, Mitzler's cry was answered from the tender.

The sound rose from a low wailing moan, like the sobbing of the wind through trees at night, mounting swiftly to a shrill and piercing cry of direst menace, while Mitzler stood clutching aimlessly behind him and looking dully from Connor's head at the gangway up to the blazing points of living fire in the darkness at the tender's top.

A second piercing cry cut the bitter cold air more insistently than before, and, while it still rang among the rocks, a lithe, yellow-gray body shot out of the darkness above him and launched itself full at Mitzler's breast.

Instinctively he leaped aside and caught up the bar which he had been seeking blindly. The brute crashed against the loose fixtures of the boiler-head tray, and for a moment enmeshed itself in the swinging slack of the fire-door chain.

Screaming and snarling under the swift blows which Mitzler was now raining upon it, the great claws of the thing shot out in lightning play, ripping his clothing to shreds, while the heavy, cushioned paws buffeted him back and forth in the narrow space of the cab.

The double row of fierce white teeth flashed and snapped in the dull cab light

in furious onslaught on the chain which encumbered the beast and the fire-door which cruelly seared it.

There were dark stains of red growing broadly down the front of Mitzler's faded suit of blue, when Connor leaped into the fray from the side, with heavy hammer and wrench aiming swift-following blows from his wiry arms.

With a last desperate, screaming struggle, the mountain cat freed itself from the ensnaring chain, and crouched for an instant under the ceaseless blows. Half-stupefied by the beating, it missed its spring by ever so little and struck glancingly the water-glass on the boiler-head as its heavy body shot past Mitzler and brought up with a muffled crash upon his seat-box.

The quick puff of scalding water instantly turned to steam from the open cocks, the sputtering roar from the broken glass, and the mingled yells of the men and the ravenous cat drowned the crashing of the cab glass through which the animal leaped—and was gone.

Ten seconds—perhaps twice that—who could tell?—had seen it all. When they had stopped the broken fixtures and bound up Mitzler's flesh wounds, there was little of explanation made to the others of the train-crew, and they were again upon their way.

Except for the occasional call of signals, silence prevailed between Connor and Mitzler in the hours of darkness yet remaining on the run. When the pallid winter sun had ushered in the Christmas Day with spears of brilliant light upon the snow-capped pines, the train had won its way to Azul del Norte at the mountain's crest. It lay there in the vast stillness, waiting for the speeding limited from the west.

Just back from the tracks, centered in a little plaza rimmed about with piñon pines, stood a modest adobe chapel, sending out from its diminutive spire the high, clear notes of a bell in early call to sleepy, brown-faced villagers.

For a little space after the engine had come to rest upon the siding Mitzler stood in the gangway, and Connor leaned from the window in spite of the biting cold, listening to the appeal of the bell for "Peace on earth, good-will to men."

Swarthy, huddled figures were hurrying in response, to disappear through the low, wide door of the chapel. The picture was one of humble peace and joy and hope.

"How long do you reckon we'll lay here for the limited?" Mitzler suddenly asked out of the silence which held between the men on the engine.

"Maybe as much as twenty minutes; maybe more," replied Connor dispassionately.

"I'll go over into the doby town for a spell," announced Mitzler, hitching the rents in his clothing together and tightening up the bits of wire with which he had roughly laced them.

"W-e-ll," replied Connor rather dubiously. Then, brightening, he added hopefully: "Better get yourself some good liniment, and rub up them cuts in your legs and face some, before we pull out. Do you good."

"I'll get me something better," answered Mitzler.

"All right," said Connor, with a decisive wag of the head. "But make good and sure you don't pull the wrong package, for I've had a man's plenty of rough house for this trip."

He shoved the cab sash shut with a bang, and Mitzler dropped down and departed without answering.

Straight to the chapel he went. Lifting the quaint bronze latch, he entered and stood, cap in hand, just within the door, and set his aching back against it.

His sleepless weary eyes followed the naked, narrow aisle down through the subdued light until they rested upon the calm face rising above the black robes of the *padre*.

Mitzler, entering silently, had come upon the lifting of the Host. He looked upon the reverent, upturned, swarthy faces, and then upon the bowed and kneeling figures clustering thickly among the poor wooden benches ranged on either side of the bare aisle.

When the sacred emblem had gone slowly aloft, and then as slowly had been withdrawn, he seized the moment of deep silence following to walk straightway down the aisle until he stood before the *padre* in the little chapel.

With his marred face and disheveled clothing, his weary stoop and his sleepless stare, he was a sorry apparition to appear in that sacred moment of a brown man's service, upon which no white man had ever before intruded. There are many places where more of pomp and less of reverence reign, from which his ignominious ejection

must have quickly followed. But not so here.

The *padre*, long accustomed to meet and satisfy the crying needs of poor humanity as best he might, was well able to meet a

"Keep it, my son," replied the *padre* as the semblance of a fleeting smile crossed his severely kind face. "Keep it among your running orders. It will hold you closer in the night; and if ever the battle is too hard, will you come again to me?"

"I will," said Mitzler soberly; "and I'll win."

He thrust the parchment into the depths of his blouse, and when his hand came forth it held a shining piece of gold coin. He laid it on the



A SMOTHERED GROWL WAS
WAFTED DOWN TO HIM
ON A SWIRL OF WIND.

man as he might meet him. He read beneath the surface of Mitzler's haggard face and saw a man.

He stilled, by the simple lifting of his hand, a rising murmur of surprise which was rapidly growing into a subdued, composite voice of resentment from the benches.

"What is it, my son? Why have you come among us at this time?"

"Have you the pledge?" asked Mitzler, squarely meeting the questioning eyes.

"The pledge of what?" asked the *padre*.

"The pledge that'll mind me always of this day, and that I'll drink no more," replied Mitzler.

Without a word, the *padre* drew him into an alcove of the chancel. There he laid before him a square of parchment upon which were traced in script the simple, solemn words that should bind him to his resolve. Shortly it was done, and Mitzler asked in boyish candor:

"Do you keep this order, or do I?"

small table beside which they stood, and said:

"I make it my offering for the day and the cause."

Then he passed quietly out of the chancel, up through the dim aisle, and out into the bright glare of the early morning. Walking quickly to the engine, he glanced at the frost-whitened cab window behind which he knew Connor would be dozing. He climbed up, and Connor turned with a sleepy stare.

"I win!" announced Mitzler.

A labored smile struggled for expression upon his stiffened face. It crinkled the corners of his glassy eyes and puckered the dull-red claw-marks on his cheek until they broke and bled afresh. He was not good to see, and Connor stared at him with a look that was little short of aversion.

"You win what?" he demanded, pivoting round upon his seat-box until he squarely faced Mitzler.

"I win out!" answered Mitzler, quite unperturbed, and handing over his parchment to Connor. "'Coon,' I'm a lot sorry that I wolfed it with you all night. I am. I thought I was goin' to bed. Took one or two—"

"I know—I know," Connor broke in, while his eyes ran rapidly over the brief document.

Then his face relaxed and shone with a glad light under the even coat of grime. Connor was not a man of much speaking. All he said was this:

"You sure do win, if I can help any.

And it's Christmas now, or was a while ago, according to the bell over there. I reckon it's here yet. Shake!"

The limited came roaring up over the crest behind a spume of powdery snow that spouted to either side high above its pilot. It shot past them, a brilliant flash of tuscan red in a shimmering mist of unsullied snow crystals, and then the way was clear for them to drop their somber train of freight down through the twisted white lane among the snow-laden pines to Del Sur and what it held of Christmas cheer for them.

LEFT BEHIND.

"Oh, sir, my box—the black one there,
Oh, would you be so kind,
It's all I have in this wide world,
And that is left behind."
I pulled the rope, and Number Twelve
Backed slowly to her place;
I can't forget that oblong box,
Nor, indeed, that lady's face.

Now if things that lose their owners,
All our sympathies so bind,
How much more should living creatures,
Who, forlorn, are left behind.
See the dog in some strange city,
Who has lost his master, kind,
I confess an honest pity
For a cur that's left behind.

With his nose upon the pavement,
How he threads the mighty throng,
Lifting anxious eyes to faces,
Whining out his lonely song.
Kicked and cuffed by every idler,
Set upon by his own kind;
I could hang the man who strikes him,
A poor dog that's left behind.

For I can't forget the school-days,
Those first days at Abbott Lawn;
When the shadow of a mother
That bent o'er me was withdrawn.
Or the utter desolation,
The despair that filled my mind,
When she left me with the master,
Left her little boy behind.

But that "order" never reached us,
And that "brother" never came,
So I took that bundle with me,
And it found a home and name.
He's as bright a little youngster,
And as pretty as you'll find—
But my wife will never tell you
How that boy was left behind.

So I pitied this poor lady,
Traveling alone that night,
With the box that held her wardrobe,
Scarce a dozen pounds in weight.
Seeking friends in some great city,
Or a lover there to find,
Or perchance a friendless maiden,
Whom love had left behind.

So I turned my brake and fixed it,
Then looked her up a seat,
Gave the fire an overhauling,
Then sat down to warm my feet.
And my heart went toward that lady,
For her weeping made me blind,
So I went and sat beside her,
Though I left a wife behind.

By this time we reached the station,
I believe I touched my hat,
When the lady came and asked me—
"Would I have an eye to that?"
I expect to meet my brother,
If the telegram went through;
Then"—she sobbed—"he'll come and get it,
With many thanks to you."

Henry Tristan, our conductor,
Now came through the crowded train;
And I told him why I signaled,
And we both went back again.
Taking up the oblong bundle,
We could find no plain address,
So we put it by for orders
To return by next express.

How the Julesburg Mail Was Lost.

BY W. J. CARNEY.

THE TRUE STORY SERIES. The old Overland Trail between the Missouri River and California was alive with hair-breadth escapades before the railroad came. Many and close were the encounters with the Indians. Many a peaceful farm was the scene of a miniature battle, and many a budding town was looted and the inhabitants routed. This story by Mr. Carney, a member of old Troop M, shows the marvelous fighting methods of the Sioux and the wonderful heroism of the old-time stage-drivers.

TRUE STORY, NUMBER FIFTY-ONE.

The Night That Ned Baker Started Out for Julesburg, Colorado, from Fort Sedgwick with the United States Mail and Three Passengers on His Old Concord Coach.



HE Union Pacific had its tracks laid as far as Fort Sedgwick, Colorado Territory—but on the opposite side of the Platte. The new town of Julesburg had sprung up in a night, and the old town, four miles away, was deserted. This was back in 1868.

It was at this station that Ned Baker, who drove the overland stage for Holliday & Butterfield, used to stop. What is it that made stage drivers real men? They were a breed by themselves.

Thirty-three years ago, dressed in army-blue, I sat on a United States cavalry horse and raised my hat in lone salute to him. Of all the men who ever pressed a brake,

drew the ribbons over a wheel, or threw the silk into a wild team, Ned Baker was the bravest and the best!

The Indians were on the war-path all along the Platte. They were more bold than ever this year; they had chased a freighting outfit so close to Denver as to be seen by the people living on what is now Capitol Hill of that city, where stands the Colorado State Capitol Building.

One coach was set upon just out of Fort Morgan, forty miles below Denver, the driver and passengers were all killed, and the coach burned for its iron. When the handful of soldiers sent out from Fort Sedgwick showed themselves, the Indians were held back until all the iron was secured—they

EDITOR'S NOTE: All the stories published in this TRUE STORY SERIES have been carefully verified by application to officers or employees of the roads or companies concerned who are in a position to be acquainted with the facts. Contributors should give us the names of responsible persons to whom we may apply for such verification, in order that fruitless inquiries may be avoided. This condition does not imply any lack of confidence in the veracity of our contributors, but is imposed merely to give greater weight and authenticity to the stories.

Series began in the October, 1906, Railroad Man's Magazine. Single copies, 10 cents.

wanted it to make lance-heads and arrow-points.

We heard at Fort Sedgwick, that same afternoon, that seven or eight hundred Indians were seen crossing the Platte between Antelope Station and the fort. Black Jack, our scout, and five of our men had seen them from where they were hid, watching a bunch of antelope, and Jack said they were Sioux.

As they crossed to the eastern side of the river, all the scouts and the overland stage people decided that the long-threatened raid along the river had come. Baker, with his coach, was to go through the fort at six o'clock that evening on the way to Denver. As there were no orders as yet to give him an escort, General Potter tried to persuade him not to take his coach through that night. But he might as well have tried to stop the river from running.

"Hostiles or no hostiles, general," said Ned Baker quietly, "the coach goes through."

The Long-Threatened Raid.

Four passengers—three men and one lady—were in the coach that night. I shall always remember how Ned Baker looked as he stepped up to the open door of his old Concord coach. A general addressing his army just before going into battle could not have looked more dignified. He took off his wide-brimmed hat, laid his hand on the sill of the window, and, with a polite bow, said:

"I hear my old friends, the Sioux, are good and plenty up the road I must go over to-night. I do not want to take you into danger and not tell you. Here at the Fort you are safe, but when you get one mile away from here, you must take your chances. We may not be molested, and we may have to fight. If you stay here you can take any of the other coaches, for your tickets are good for the number of miles you paid for.

"Of course, if any of you come with me to-night, I will do my best to land you in Denver; but mind, if attacked, we must fight our way through or be scalped. Now, it rests with you what you want to do."

"Well," said one of the passengers, "suppose we all remain here overnight."

"That, gentlemen, is your own privilege," answered Baker.

"Of course, you will pull out in the

morning as soon as it is light?" asked another passenger.

Baker looked straight at him, and said: "As for me, sir, I pull out now."

"Why," said the other, "if you have no passengers, what's the odds whether you go on or not?"

"It's this way," said Baker, "I carry the United States mail. It must be delivered on the other side of the Rockies on time. If we allowed a little thing like this to stop it, old Uncle Sam would take away our job."

"If I Can," Said Baker.

"Then you go through, anyway?" asked the passenger.

"If I can," smiled Baker; "but the redskins may have something to say about that. We may lose our hair before morning."

"That being the case, pard, I go, too," grimly said a third passenger.

"Yes," broke in the young lady—who was a Miss Cora Evans—"let us stick together. We started out together, and let us go through together."

Baker looked up at her and said: "God bless your pretty face, lady. You're the right sort for this country, but I could not think of such a thing as allowing you to go through with me to-night."

"But why?" she pleaded. "I can shoot. See here! My brother sent me these revolvers, and a friend showed me how to use them. I am not afraid. Besides, I must be in Black Hawk at the appointed time—and—" She stopped, blushing and confused.

Just then Quartermaster Bothwell and his wife came up to the coach and took charge of Miss Evans. Baker refused to let her go into such danger as capture by the Indians. Unwillingly she stepped from the coach. Her betrothed husband was expecting her in Black Hawk, a mining town in the Rocky Mountains up behind Denver.

The three men voted to go along with Baker and his messenger. The army officers filled the coach with loaded guns and hundreds of cartridges.

The sides of the Holliday & Butterfield coaches were lined with sheet-iron. As Baker climbed into his seat and sorted out his reins, we all cheered him and his brave little crew. The first stop was the Fifteen-Mile Ranch; the next, Buffalo John's, twenty-eight miles above the Fort.

At one o'clock that night, just seven hours

after Baker left the Fort, a pale-faced young stock-tender came spurring a tired horse down the road, and was halted by the guard at the upper end of the stables.

He asked for the commander. The corporal of the guard jumped onto a horse, bare-back, and galloped with him to General Potter's quarters. The old general came to the door in his night-shirt, and listened to the stock-tender's story:

"Indians have been seen for the last three days, general," he said, "hovering on the tops of the bluffs that line the river road. They ride down to the Platte for water, then back again; and it is plain they're gathering in large numbers for some devilish purpose.

"This afternoon a large band, two miles above Antelope Station, were riding their ponies up and down the road as if on a frolic, or running races. A little before sundown they crossed the Platte and rode in full view, but out of rifle range, and then disappeared toward the west.

"I told Baker about it while changing his horses, but he did not say much. He had not got more than a mile away when I was sure I saw an Indian on the top of the high bluffs. Finally, more came out to the point. I could see them from the station, but I was sure that Ned could not see them from where he was.

"As sure as shooting, general, they're going to attack the coach in the Big Sandy cut! I flopped on my pony and, with my rifle, I rode as close as I dared to the horsemen, and listened. I soon heard the firing—"

"Guns? Springfields?" interrupted the general.

It Was the Big Guns.

"Yes; it was the loud report of the big guns, general—not six-shooters. I rode farther on and listened, and there was no mistaking the report of the guns. I judge there was a good many of them. I made up my mind to see what was up, so I rode down toward the river and what is called Snow's Hay Camp. I kept that between the place where I judged the fight to be and myself. It was just light enough for me to see; and, sir, the coach is there, surrounded by Indians.

"There's heaps of them; and I'm afraid, general, 'less they're helped right soon, there won't be no one to help—"

"Corporal! Send for Captain Mix! Quick!" ordered the general.

In five minutes "Boots and Saddles" was sounding from the parade-ground, and Tony Dawson, the chief bugler, was blowing that famous old call through the open doors of M troop's barracks.

The boys were soon leading into line.

"The hostiles have ambushed Baker! They've got the coach!" ran the whispered news.

"Silence in the ranks!" ordered the sergeant.

We knew that there was work ahead, and he knew that we would not all come back; yet every man in line was impatient to get the command, "Forward!"

We had only twenty-seven men that night as we rode out of the Fort. The rest of Troop M, thirty-three men, had gone up the Laramie Road to Mud Springs, where a cattle-train was reported to be in trouble. They had been gone four days; and, as we had heard it was more of a scare than anything else, the men were expected back at any moment.

We Are Off!

Captain Mix left word to send them right along as soon as they got in, and for them to bring one day's rations, as we had nothing except what could be grabbed up at the moment.

Buttoning our uniforms, we swept out of the Fort and down the road on a trot; then, eager as the men, the horses broke into a run. Counting cut-offs, Baker and his coach were twenty miles away. We rode the first ten miles in less than an hour. It was quick going for cavalry on a dark night.

There was no wind, and a shot could be heard a long way off. We stopped and listened. Not a sound! The mystic plains were absolutely still. Was it all over? Were we too late? Were we yet too far away to hear the fight?

We allowed the horses to walk long enough to catch their wind, then sent them along at a gallop again. After keeping this up half an hour, a halt was made and we listened—but not for long.

We heard the shots ahead and knew that there was still some one alive and able to shoot—but we were yet miles away. We left the road and the tired horses were started on a dead run. This, however, was a bad move for we had not gone more than a half mile when, ka-plunk! Joe Mately's horse went over and over. The horses be-

hind him shield. Five more went down in a tumble. They kicked and snorted but one only was injured and he had only a sprained ankle. A prairie dog hole had caused all this mix up.

We got back to the road again, where there was no further danger of dog holes, and away we went.

The firing from the bend in the road ahead was not as brisk as it should have been if five men were handling the guns. Those men were in a desperate place, and it might be all over before we could get there.

Captain Mix, though brave and cautious, was now running right into whatever might be behind the big hill ahead. How many hundreds of Indians were waiting for us there we did not know, perhaps there might be several thousand—and of us there were but twenty-nine. The stock-tender had come along with the old man's rifle.

We could see the top of the hill black against the sky. The captain gave no word of command, but just before turning the bend he raised his saber to halt. We stopped. Over the hill, through the night, came the sound of the shots. Quickly and noiselessly we gathered close around him. To the panting circle he said in a whisper:

"There are not many of us and we don't know how many Indians there are around the point of that bluff, but we do know that our help is needed. I want you to dash in and give them the best you have. All of you fight your way to the coach. If we would help them we must get to them. Do you all understand?"

Hundreds Were Waiting.

We all heard and understood. The captain took the lead saying, "Come on! Remember, the coach is the rallying point."

Except the soft thud of our horses' hoofs on the buffalo grass and those crying shots there was not a sound. As we rounded the point of the bluff, all the horses were in a lope.

Suddenly we got a full view of the savages. Great Scott! but there was a lot of them. The ground in front of us was covered with campfires. In the dark beyond, faintly lit by rifle flashes, was the coach.

We swung around a small grass fire which the Indians had set in hopes of burning or smoking out Baker; but, happily, the wind had taken it away from

them. Then we dipped into a little hollow, and up again in sight of it all.

Between us and the coach, and squarely in our front, was a dark, seething mass of Indians. They had not heard us. We did not wait for the order, but sent our horses on a run straight at them.

We lay low on our horses and dashed on. We were pretty close before they had any idea that we were within fifty miles.

The Answering Cheer.

United, we gave one mighty cheer. That woke them up; and when the blaze of twenty-nine carbines jumped into their faces, there was one of the greatest stampedes ever seen.

The red-skins scattered to right and left, except fifteen or twenty, who were lying where we shot them. Before they could rally we sent another shower of bullets into them.

The answering cheer from the coach was music to our ears. We fought to get to it, but we seemed to have run into the whole Sioux nation. We were soon fighting for our lives, and were as badly in need of help as those in the coach.

With what little light there was from the stars and camp-fires, we saw groups of Indians every way we looked. The rush of the charge had scattered our party as well as the Indians, yet we kept together as best we could and pushed for the coach. It was like going against the tide. They were everywhere, and they were not afraid of us.

We kept firing as fast as we could; but it was difficult to make the shots tell, for the Indians were closing around us—now hiding behind their ponies, now lying flat on the ground—and over and around us from all sides the sharp arrows now began to whirl.

We mustered eighteen of our number, put our horses on the dead run, and made a dash for the coach. As we came on, the Indians fronting us, we blazed at them with our carbines, then whipped out our six-shooters and opened on them.

This was more than they could stand, and we broke through; but they closed in behind us and pressed us so hard that when we came to the coach we could not stop, but were compelled to pass right on.

I was so close to the coach that I could see two of the men lying perfectly still.

The broncos hitched to the coach were dead in their harness.

Right behind us came the Indians. A hundred yards beyond the coach we turned and tried to charge back. It was no use. We could not do it. Besides, our little band was again broken up, so we who were left together dismounted and opened a steady fire.

Now, eight good shots, back to back, are dangerous, and the savages held off. We did not waste a cartridge, and whenever we could see an Indian plain enough for a sure shot he died.

There were but eight of us in the squad, and I said to Barney McCune, who was popping away on my right: "Well, old man, if all the men now missing are killed, the old company will be easy to account for by daylight."

An arrow purred between us. We both let drive at the archer—and got him.

We had been at bay about five minutes when the steady firing from our part of the field attracted three more of our men. They came to us from the direction of the river. They reported that the Indians seemed to be drawing off—although they were thick enough around us.

All at once Pete Smith shouted: "Look! Look, boys! What are they doing? Look over there!"

It wasn't necessary to watch Pete's hand. The light showed me where to look.

The Indians had managed somehow to set fire to the old coach.

As it flamed up we could see a white man lying face down about six yards from it.

The Thick of the Fight.

Now that the coach was in flames and was within sure range of our carbines, the Indians kept out of sight. But how they yelled! We could see nothing of them; but on all sides, from far and near, the very night seemed to be shrieking at us.

Our party was too far back to be seen; but we soon had to get still farther back, for the fire was getting brighter all the time.

All at once Captain Mix whispered: "Look at that man lying near the fire! Do you see him move?"

We had supposed him dead, and a few replied: "No, captain. He is dead."

"But, look!" insisted the old man;

"watch his hands! Look, quickly! They are moving!"

Dropping flat on the ground, I looked at the man's hands. I could see them open and shut. At one time I knew that one hand made a distinct motion to us.

"Captain," I said, "it is Ned Baker! And he is alive! I not only see his hands open and shut, but I can see him motioning to us with them, and with his head also."

"Are you sure?" asked Captain Mix.

"Yes, captain, I am sure. I can see his eyes roll as plainly almost as I see yours."

In the Jaws of Death.

"What's to be done?" muttered the captain. "It is almost certain death to go into the light there where he is, and he is nearly done for; but we can't leave him there—"

"Captain Mix," I said, "let every man get the magazine of his carbine filled, and one in the breech. Then let me make a dash for Baker. He is one of my best and oldest friends. When I go let the boys open on anything and everything in sight. That will give me a chance to get to him."

"You are not going over there, Carney; you would not live to get half-way across the bottom—"

Baker moved again, and the old man said: "All right—try it."

I got ready. Bending low on my horse, I sent the spurs into him; and it seemed as if I were beside the wounded man in three jumps. I leaned down from my horse, thinking to half carry, half drag him, but he was as lead.

The poor fellow was shot through the groin, and an arrow was sticking in his side. His head lay on the ground with one side of his face pillowed on the buffalo grass.

When my horse came thundering to his side Baker did not move, but only looked up in a tired way and smiled as if sleepy.

"Kill me, Billy! Shoot me and go—or they'll get both of us alive," he murmured. But I couldn't kill Ned Baker.

The burning coach was now the only protection I had, except the rifles of my comrades, who shot so fast and well that the reds for the moment were held at bay. But *whir—whir—whir* came the arrows!

As I leaned from the saddle to get a grip on the helpless man, who kept on

begging me to kill him, my good horse Dan began to quiver. Suddenly his hind-quarters sank to the ground. He tried to get up, but could not. He kept his front feet on the ground and held his noble head high in the air. As I stepped from the saddle, I saw that he was shot through the spine.

Poor old Dan, who had carried me so many hundreds of miles, was dying before my eyes!

Dan Put Out of Misery.

Just then brave Joe Bucholtz came to my side. His first act of mercy was to put Dan out of pain. I could not do it.

Then we picked up Baker, put him on Joe's horse, and I held him upright while Joe jumped on behind. Baker must have fainted, for he said nothing and hung quite limp.

Joe put both arms around him, hugged up close—then, sinking both spurs into the sides of his big charger, took a bee-line for the little reserve. I gripped the saddle and ran by his side. I could run in those days, and could set a pretty hot pace for any horse for the first hundred yards; so I had little trouble keeping up. It was lucky that I did so, for Baker began to slide off on the side where I was running, and, as Joe could not pull him back alone, the horse shied to the left, and we could barely hold him on.

I had just strength enough left to lower him to the ground. The boys and the old man gave us a silent cheer. Joe and I had done our work in less than one hundred seconds. I can tell you that standing in the open light between the fire of twenty-seven hot carbines and a bunch of Indians off there in the dark, who were trying to dash in on you, makes a man work fast!

The rest of the command, whom we supposed were killed, had just joined the captain's party. This gave us all new courage. The old man had Baker carried by two men, each mounted, and, by keeping these two riders closed in by a set of fours riding on each side of them, it made it almost impossible for the wounded man to slip to the ground.

Quickly Baker's escort moved toward the river. The rest of the company formed a thin skirmish line to cover the retreat, and this line kept up such a target-finding fire on the savages that it prevented them

from making any of their favorite rushes—yet they pressed us like wolves.

When we came to the river Baker was laid under the bank, safe for the time being from the fire of the Indians.

The red-skins were intent on annihilating us, and it was the captain's plan to cross the river as soon as he was sure that he had together all the men then alive.

With his permission, I unsaddled one of the pack-animals and was again mounted, though without a saddle. Ten of us kept well out, and kept firing at every shadow. In the dim light reflected from the glowing coals of the coach I saw that there was not an Indian near it. I could see poor old Dan where he fell from Joe's bullet. I whispered to the three men nearest me, and they agreed to go with me; and we four started through the dark at a trot for the coach.

When about three hundred yards from it we went at a dead run; but as soon as we got near my horse snorted, shied, and refused to go a step closer to Dan and the dead broncos.

Rescuing the Saddle.

I slid off, and, knife in hand, crept over to Dan. With three slashes I freed my saddle from the body of my dead friend. I threw it over my shoulder, and then I stooped and gave my old companion a good-by kiss and returned to my comrades.

One had caught and was leading my mount toward me, but all I could do just then was to jump onto his bare back with my saddle and ride break-neck for the river.

It was high time we did ride for the river, for the Indians had seen us, and we could hear the hoofs of their ponies as they tried to cut us off. But we got there ahead of them, and a singing shower of bullets from our watching comrades threw them back.

Dawn was not an hour away. Indians, at the best, are poor fighters in the dark. Because of some foolish superstition they dread to fight at night or during a thunder-storm—and this has saved many a white man's life—but daybreak and twilight are their chosen times. Then it is too dim to hit them at long range, and they can come tearing in to close quarters where their arrows count for more than bullets.

If there is any difference, I should say—from my experience—that they fight best at the first peep of day—and that hour was almost at hand. All was now very still.

Captain Mix.

Not a sound came from the dark, pocket-like place under the bluffs that skirt the stage-road. Over there in that black gulf we knew that hundreds, perhaps thousands, of the red devils were waiting only for the veil of night to lift that they may rush us into the river and shoot us down in the water.

As the Platte was a swirling torrent then, and full of quicksands, we could not hope to cross it until there was at least a faint sign of daylight.

There was nothing to do, therefore, but wait. It seemed like waiting to be executed. There was nothing to shoot at, to listen to, or to look at, yet we knew that the Indians were hatching something for us, while all we could do was to sit still on our horses and wait.

They, too, knew that something was up. They were nervous, restless, ready to jump at anything, yet always eager to charge; and such uncertainty taxed a man's soul more than the hottest fight.

However, the old man's brain was working—and we had learned to trust that gray head. No dashing, prancing, namby-pamby, overbearing strutter was brave old Captain Mix—just a man through and through, a soldier to the core. He would have killed his best friend with his own six-shooter for disobeying orders on the battlefield, and yet when there was not grub enough for all he would go hungry with his men. He could quell a mutiny alone and with bare hands. When the company mascot, Army Jack, a white bulldog, died, Captain Mix attended his funeral. Once when they were about to cut off both my feet because they were frozen, he hid me in his house and his noble wife nursed me with her own hands in secret for weeks until I recovered, and they were hunting me everywhere as a deserter.

He would have done as much, too, for any man in that little troop silently waiting there with him in the dark. We trusted him, and left everything to him.

He knew just what to do. Twenty men were formed into a line five paces apart and sent out to carefully guard against a

surprise. We walked our horses, and each man removed or made fast all trappings that would make a noise. Several of the men tore strips from their blankets or from the lower part of their blouses, and passed them along to the others to tie between the outside of the bit and the mouth of the horse. This did away with that jangling noise made by the animals as they clamped their bits when held in restraint.

Twenty men, even on horseback, can keep pretty quiet in such a place. As we neared the black pocket we halted. Leaning forward on our horses, we listened. All was still. A little bird twittered in fright as it flew away, the grass rustled in the breath of the morning breeze, but there was a *something* in the air—something that seemed to buzz and whisper. It might have been my imagination, but I thought I could hear men talking in whispers. I knew that it would not be good to hold the troop in that uncertain position very long, and was wondering what the old man would do next, when a single horseman rode down our front.

I was startled. Was it an Indian scout? The next moment I heard the voice of the captain, low and tense, talking to us as he rode.

"Keep quiet, men! Remain as you are. Have every cartridge in that your guns will hold. If the attack is made before I give you orders, try and hold this line. When you hear the bugle sound the 'rally,' turn, and make for the bank of the river—then turn, deliver your fire, and try to cross.

"There are now twenty-one of us in this line. We can send a hundred and seventy bullets into them in twenty seconds. That will stop them, and give you plenty of time to get to the river. Reserve your six-shooters to use in the water. Now, remember! Your own lives and the success of this night's work depends on your holding this line. Old M Troop has never been wiped out, and won't be this time.

Old M Troop Was Game.

"Each one of you can whip twenty Indians, and we twenty-one together are good for a whole regiment of them. There are three badly wounded comrades down at the river. We are now trying to get them over. Hold this line and we are all right—"

Thus our captain talked to us as we slowly rode along; but he knew, and we knew, that, say what he might, an avalanche of Indians threatened to sweep us into the river at any instant—but we intended to hold that line.

We had the Spencer carbine, at that time the best weapon on the plains. Besides, each man had two big six-shooters. This gave every man twenty shots in twenty seconds—and such a fire from twenty-one men, if well pointed, will double up a pretty large body of Indians.

We waited. Every minute seemed an hour. The watch in my pocket made an awful racket. Our breathing came long and deep. We knew that out there in the darkness an army of red-skins was waiting, and we also knew that the first streak of light over there behind the hills meant an attack.

I was on the extreme left of the line. We were formed in a half-circle. The captain sat like an iron statue right in my front. An orderly came silently from the river behind us, and in a low whisper reported that the party there was all ready to attempt to cross the river with the wounded.

"How's Baker?" breathed the captain.

"Dead, sir," replied the orderly.

"Tell them to strap the body to one of the pack-saddles and start at once."

As the orderly rode back, the captain turned to me and murmured: "Ned Baker was one of the whitest men I ever knew—"

"Hark!" I interrupted. "Listen! Captain, did you hear a bugle?"

"No," he breathed.

With open lips and halted breath we listened and heard the clear notes of a bugle. Again we heard it—oh, so far away!

A Bugle-Call.

We could hear only a note now and then as it traveled up the valley, the water helping to conduct the sound; but the next moment the bugler must have come around a bend, for the notes broke on us clear and ringing as the bells of heaven.

Then, although miles away, we plainly heard the rally-call. The Indians heard it, too. Help was coming—but so was the dawn.

"My God!" exclaimed the captain, "that must be the lieutenant with the rest of the men. That bugler is moving. He

is blowing the rally, because it is a good call to make a noise. Listen! There it is again. He is now blowing all the calls—retreat, stable-call, anything to attract our attention.

"Dawson, who is that blowing those calls? Can you tell?"

"Fairchild, sir, I am sure," eagerly answered Bugler Dawson, who was next in line.

The captain turned to me and said: "Have you a good horse?"

"I don't know, captain," I replied; "he's a strange one to me—one of the pack-animals."

"Here, dismount!" he said to Dawson. "Jump on that horse, corporal, and ride for your life—and for the lives of those men. Remember, if you don't get to the lieutenant and stop him before he gets to the Big Sandy Cut, the whole Sioux tribe will kill them as they turn the bend!"

I jumped on the bugler's horse.

"Ride!" added the captain. "Kill the horse if you must, but get to the men before they get to the cut. Keep well to the west of the road to avoid the deep sand and the Indians—"

On a still night a running horse can be heard a long way; but just then the valley was full of running horses, for the Indians were moving, and no doubt took me to be one of their own kind. I bent low on his neck and sent him across the road at a keen run. As I circled well out from the dangerous path, I drew up a little to listen.

Running the Gauntlet.

It was well I did, for I could distinctly hear the jabber of the savages as they were forming to surprise the other half of the company when they turned the bend.

On each side of the road a large party of Indians were bunched, silently waiting to perform their part of the program. I was in a tight fix. I must either ride through the opening made by the two groups of Indians, right along the road through the very middle of the ambush, awaiting the coming lieutenant; or else ride around them.

My time was too short to ride around. I could hear the loud laugh of some trooper, and heard distinctly the command, "Less noise back there!" given by the lieutenant himself.

All at once it became very dark, and on

the impulse of the moment I slid from my horse, turned him toward the captain's command, and gave him a sharp jab with my carbine. I then bent over and ran straight down the valley between those two groups of Indians. Fortunately, they had not yet heard or seen me, so I kept as close to the stage-road as possible.

I came to the bend, and there was no one in sight. It must be that I had not been seen, for lurking in the dark on either hand were two clouds of Indians. I could not see them—it was still too dark; but I could *hear* them near. They were probably a hundred yards away. As I hot-footed it through the cut I could hear ahead the clatter that is peculiar to a moving squad of cavalry.

Along the River-Bank.

In another moment I met two men riding in advance, and in a loud whisper challenged them to halt. Before they could answer me I shouted in a loud whisper: "Don't come any closer!" They understood. I jumped up behind one of them, and we rode back to meet the lieutenant.

I told my story as quickly as I could, and suggested that we ride down to the river and then try to join Captain Mix by moving up along the bank.

This plan worked all right. The lieutenant's command was soon at the river. Then we began to deploy into a skirmish line to find Captain Mix. Before we came within hailing distance we heard firing. It soon developed into the heavy, solid reports of the big-caliber guns.

There was no doubt now but that the Indians had discovered that their trick had failed, and in their chagrin had viciously attacked the captain's party. It was all too evident that the Indians were trying to clean them out before we could help them; then the red fiends would swing back on us, and by sunup the hair of the whole command would be Sioux property.

Concealment was now off. The lieutenant gave the command to gallop, and

we tore into that band of Indians like a snow-plow.

Fairchild's bugle answered Dawson's, and cheer met cheer as the two commands swept together and became one under the orders of the old man. M Troop was itself again!

The old man was happy, and the lieutenant tickled. The troopers yelled like schoolboys, and made their sixty-two Spencer carbines talk turkey.

It did not take us long to clean the bottom land of Indians; but day was now breaking, and on the top of the high bluffs against the sky we could see hundreds of them, too far away to fire at.

By the time it was good daylight we were crossing the Platte, while the Indians began to show up in large numbers along the bluffs. As the day increased they rode down to the stage-line; but they could not hurt us, for had they attempted to cross the river we would have killed hundreds of them while they were in the water. As we filed away for home the Indians left us, and we saw no more of them.

At the first halt we left poor Ned Baker in a shallow grave that we dug with our knives.

All day we followed the river until opposite the Fort. We crossed just at dusk, and were soon asleep in the barracks. Miss Evans was heartbroken at the fate of the coach, and we were all thankful that she had been saved.

Two weeks after the night fight I went as one of ten of our company to Moore's ranch to escort the down coach, with Paymaster Bates as a passenger. Having plenty of time, we exhumed Baker's body and buried him just behind Antelope Station, not more than forty yards from the old stage-road he had traveled so many times.

We got an unplanned board, lettered it with black axle-grease from the hub of a government wagon, and stuck it in the ground at the head of the grave. There he sleeps, as brave and gentle a man as ever lived.



SWINGING DOWN THE 49.

BY CHARLES WESLEY SANDERS.

Something More Than the Peace That Passeth All Understanding Came from the Light That Failed.

BILLY ran up to my room, his face like the snow that was driving against the pane outside. He threw himself into a chair and sat there, clasping and unclasping his hands and biting his lips to keep them from trembling.

"What's the matter?" I asks, thinking he and Kitty had had another of their spats. They were having them so often that I had kind of got used to them. But Billy would always get worked up to about the way he was now. He hadn't sense enough to keep cool; he didn't know that when a man keeps cool he's got it all over a woman with a serpent's tongue.

"She's gone," he says, with a moan.

I was pulling on my shoes, for I'd been called for a fifty-eight, and I hadn't much time. I stopped with a shoe half on and looked at him.

"Gone?" I says.

"Yes, Kitty; she's run away."

If that was true, Billy's moaning and shaking was justified, all right. If Kitty had run away from him, if she meant to stay away from him, she had broken his heart. That's all there was to it, because no man ever cared more for a wisp of a black-haired, blue-eyed, little Irish maid than Billy cared for Kitty.

She had been the operator over at Arden Junction, and he had fallen at her feet, as you might say, the minute he had seen her from the engine-cab, while the engineer had been inside getting his orders.

Billy was firing the local, and one day they had to pick up a bunch of cars at the junction. They was hard to get at, and by the time they was coupled onto the train the local had to get in for a through freight. Billy always did have nerve, and it didn't take him long to get chinning with Kitty.

She blushed and smiled and made eyes at him, and he never dreamed that one so pretty had such a terrible temper.

So soon as they was married—which wasn't long after this—she began to complain. I don't mean that she began to whimper; it wasn't that kind of complaining. She was too healthy and strong a little minx for that, but she was forever objecting to what Billy did. If he bought a new necktie, she'd look at it when he put it on, and then she'd say:

"For goodness' sake, why don't you get some color besides blue? You know you always look a fright in blue things."

Likewise she objected to his shoes, and his hats and his suits. If she sent him to the grocery-store, or the meat-market, she always asked him why he didn't buy just the opposite to what she had particularly instructed him to buy?

I was rooming with them at the time, and Billy used to tell his troubles to me. He had to tell them to somebody, or he'd gone nutty. I never said a word outside the house, but pretty soon there began to be gossip.

Some of the women in the village kept fooling around with the story till they had Billy beating his wife. People began to look at him kind of funny. Once in a while, when he'd get into a wrangle with one of the boys, they'd taunt him by saying: "Why don't you?"

Billy's face would turn pale at that, and he'd never have a word to say. Gradually he got nervous and half sick.

Then, about a week before this particular night, he went to Kitty after supper and tried to make peace with her. I was upstairs, but I couldn't help hear what they said.

"For goodness' sake, Kitty, let's try to

get along somehow without quarreling," Billy pleads.

I could just imagine how Kitty looked up at him from her sewing.

"Who in the world is doing any quarreling?" she says. "I'm sure I haven't opened my lips to-night."

"We don't get along right together," says Billy, and I suppose he was clasping and unclasping his hands nervously.

"What do you want to do—get a divorce?" asks Kitty.

I heard Billy jump up.

"Get a divorce?" he said, so loud you might have heard him on the street. "You know I can't live without you."

"Keep still then, or you'll have to live without me," says Kitty, and her voice was like icicles.

Way up-stairs I could hear Billy grind his teeth.

"I won't keep still!" he shouted, his nerves probably being all tied up in a knot by this time. "This is my house, and I'll talk all I like!"

Kitty laughed a little longer and a little louder than you'd thought was necessary or natural. Then it was all still down-stairs. I guess they didn't speak in the week that followed, and now here was Billy moaning and carrying on about her because she had gone. I tried to brace him up.

"Did she leave any word?" I asked.

He fished out a scrap of paper like the wronged guy in the show does.

"She just says she's going," he said, "and for me not to follow her, because it won't do me no good."

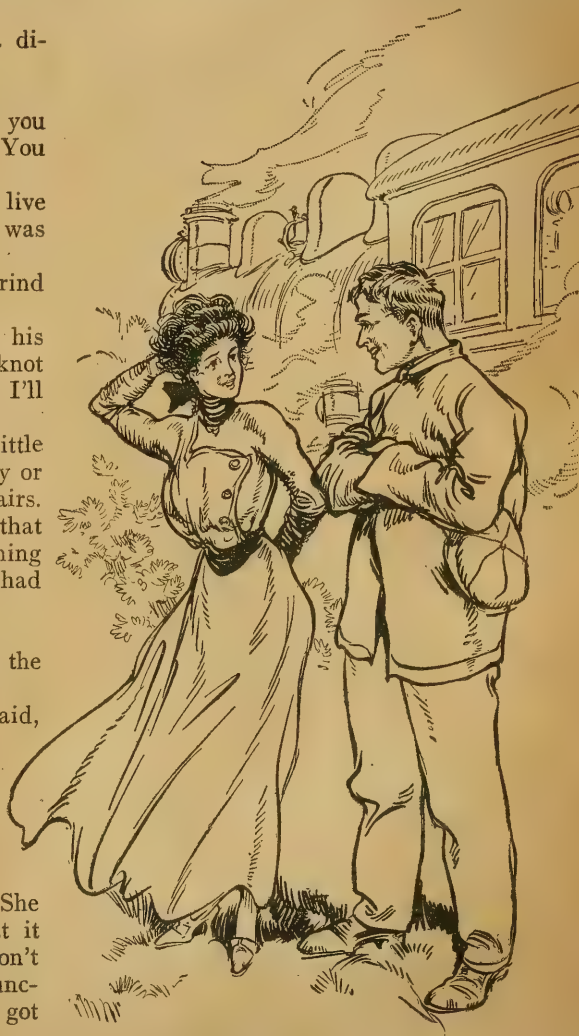
"Aw," I says, "she's probably trying to make you sore. She's probably gone over to the junction to her mother's."

"What's the odds?" asks Billy. "She says she won't see me any more—that it won't do me no good to follow her. It don't make no difference if she's over at the junction, or in Africa, or next door. She's got her mind made up—that's all."

Knowing Kitty's temper, I was afraid maybe he was right. He got up after a while and dragged himself down-stairs. When I came down in the morning he was sitting at the dining-room table, his hands in his pockets, staring straight ahead of him at the carpet. I asked him if he were going out on his run. He wanted to know what time it was, and I told him he had an hour. He jammed his hat on his head and started

out. As he went down the sidewalk, he kind of staggered like a man who'd been drinking; but he didn't drink. I guess he was just hurt, as if he'd got a swift smash in the nose that'd dazed him some.

I'm not strong on butting into the troubles of other folks; usually I've got enough of my own. But I got after a bit so I couldn't



BILLY ALWAYS DID HAVE NERVE.

stand the look that was slowly becoming fixed in Billy's eyes. I know that lots and lots of times he looked at men and things and never saw them.

When he heard what you said to him—which was not very often—he would answer by a nod, or by "Yes" or "No." He didn't eat enough to keep a canary-bird

from starving to death. He told me to go ahead and help myself to whatever I wanted in the house, and I used to cook my own breakfast over Kitty's stove. When I'd ask Billy to eat, he'd wheel around in his chair, take a look at the food, taste it maybe, and shove his plate away.

"I can't eat," he said one morning. "I can't do anything." He dropped his head into his hands. "I'll never be any good till she comes back," he moaned.

Then he got up and went to work with that same dazed look in his face. I'd been thinking that probably Kitty was as anxious to see him by now as he was to see her; and I made up my mind to go over to the junction to find out if she was there.

I sure had cold feet when Billy McKenna slowed up a fifty-eight and let me drop

off there the next day. I found out where her mother lived, and really shoved myself up to the front door by the nape of the neck.

I supposed the old lady who opened the door was her mother. Yes, she said Kitty was there, but she didn't know as Kitty would see me. She'd ask.

I sat in the parlor. Pretty soon Kitty comes tripping in as gay as you please.

She was just like some good-looking school kid then. She had her black hair down her back in two braids, and her blue eyes were dancing. She grabbed hold of my hands and shook them to beat the band, as if I was her best friend. Then she started a string of conversation that, on the level, lasted for thirty minutes, and never a mention of poor old Billy in the whole of it. She made me sore.

"If you're through with the gabble now," I says, when she had finished, "we'll talk a little sense."

Aw, I knew that it was all put on. The brightness died out of her like you'd snap a gas-jet shut. Her face looked old. I noticed there were lines under her eyes.

"Well, what is it?" she asked.

"What're you doing this to Billy for?" I asks.

Her face turned red.

"I don't know as it's any of your business, Tom Mitchell," she says. "If I want to leave him, I'll leave him. He said it was his house. Now he's got it all to himself, and he can talk himself to death for all of me. I suppose he thinks he's a big man, now he's got an engine."

"Got an engine?" I repeated.

"Oh, Mr. Innocence," she said, with a kind of laugh, "you know they've given him an engine. He goes out on his first run next week."

I didn't care to contradict her. It didn't make any difference. But to think that Billy had an engine after his long wait, and that he had been so wrapped up in his grief that he didn't think it worth while to tell me.

Why, many and many a time, when he was first married, he used to look at the big moguls kind of wistfully and say to me, "I hope I'll be getting one of those old boys before long, for her sake."

Now he'd got one, but instead of coming home to her with pride in his eyes and telling her, he'd hadn't given it two thoughts; and she had learned about it at second hand.



ONCE SHE WAITED FIVE HOURS FOR BILLY'S ENGINE.

I got up and left. It was a little too much for me.

It certainly did seem as if that winter was to be the winter of the big snows. The plows were out every day from early December till the March rains came. And cold! Whee!

One Sunday afternoon, it began to blow a little. An hour later a few flakes were whirling down. In the next hour the snow thickened; and when darkness fell, the air was choked. You couldn't see your hand before your face.

I thanked my lucky stars that I had just come in and probably wouldn't be called till morning. Billy had got in before daylight, and as he expected, he was called for a forty-nine—a fast freight west bound—about dusk.

This was his third run with his engine. He didn't seem to be interested in the new job particularly, nor did he seem to care that he had to go out in the worst night we had had that winter. He accepted it all as calmly as the oldest veteran on the road.

"They'll run you pretty light," I said, by way of sympathy. "They likely won't be giving you more than fifteen loads in this storm."

"Oh, I don't care," says Billy. "I can take 'em through, I guess. If I can't, I can get stuck in a drift."

As I have said, Kitty had been the operator at Arden Junction. My guess that she was lonesome for Billy proved right, for she used to go down to the office where she had worked and watch the trains go by.

The regular operator told me that once she waited five hours for Billy's engine to come over from the other terminal. When it went by, she stood looking through a crack in the door till the train was out of sight.

The operator said, too, that she ran out the door and home without a word then. I'm making a bet that there were nights when the poor kid cried herself to sleep, but she had an Irish pride and you can't beat that.

This night, I figure, she had a nervous streak. When you've worked on a railroad, a storm doesn't help that kind of a streak. So about the time the snow was thickening, she wraps herself up and goes down to the office.

It happened that the operator had left for supper. He went about dusk, and he hadn't put up his block light—we were then using the old-fashioned block that had a light set on a peg on top of it, which the operator



turned by pulling a rope inside the office.

Kitty found the door unlocked. She went inside, lit the lamp, and sat down at the desk. She cut in the train wire, and for the fun of it began copying orders on a pad of paper with a pen. Pretty soon she hears an order sent to forty-nine and to a fifty-eight.

She told me she got a funny little shock when the forty-nine was reported out and she heard Billy's name go over the wire. She sat there, curled up in the big arm chair, waiting till the forty-nine should come by. She said she was worried about Billy being out in a storm like that. Some of the old love was left in her heart.

There isn't any feeling like that which suddenly comes when you realize that two trains are bearing down on each other with neither knowing that they haven't got the right of way.

Even if you are not at fault and the people in danger are only acquaintances, you get an awful tight feeling around your heart.

What d'ye suppose Kitty felt when the operator at Wallace, the station beyond Arden Junction, reported the fifty-eight by?

Kitty had copied the order to the forty-nine and the fifty-eight, and she knew they

were to meet at Wallace, and the fifty-eight was to take the siding, so that the forty-nine, with its fast freight, could go by without delay.

I guess it would have done Billy good to have seen the look in her eyes then.

She told me that she sat half paralyzed, staring at the sounder, for a full minute. Then she dropped the block and ran out to look at it; but, of course, there was no light.

She ran inside, she was nearly crazy. The storm was at its height. The wind was steady from the northwest, and every inch of it was packed with snow.

Kitty lit a red lantern and ran outside once more. She couldn't see a thing, but she located the track with her feet, and, in that awful storm, with the wind whipping her hair free and the icy snow biting her face, she stumbled along over the half-hidden ties.

She figured afterwards that she ran about a third of a mile. Then she heard the hoarse whistle of Billy's engine out of the dark.

She stood still and looked, but she couldn't make out a thing. Then she heard the "champ-champ" of the train as it went over a frozen frog.

It was so close she almost dropped her lantern, but when she remembered, she lifted it high and began to wave it, trying to swing Billy down.

She might as well have waved a match to an air-ship six thousand feet up in the blue.

As it was, the engine almost got her. Billy could not see her lantern, and she couldn't see the headlight of the engine because of the snow.

She jumped just as the big black shape was almost on her, and fell into a drift. All she could see, as she gathered herself up, was other dark shapes going by in the driving snow.

She stumbled up, screamed, and waved her lantern, but the wind drowned her voice and then suddenly flicked out the light.

As the caboose slipped past her, she stood there crying and yelling and waving a lantern which had no light.

She began to cry. The tears ran down her cheeks and froze. Then she quieted herself and listened. Her sobs came every once in a while, and she caught big mouthfuls of cold air.

A scream from Billy's whistle tore a hole in the storm. He had seen! She waited for

another noise that she also knew was coming. It seemed a long time, although it was probably about half a minute.

The engines were almost on top of each other before Billy saw the fifty-eight.

That other noise that came to Kitty's ears was a sudden crash and then the ring of metal snapping and tearing in the cold.

They had come together at thirty miles an hour. Kitty knew that Billy had not had time to jump.

In such moments, the little things in life just seem to lose themselves. Kitty said that she only wanted to get to Billy.

In some way she made that third of a mile back to the wreck. Two engines were locked together just this side of the telegraph office. Those of the crew who hadn't been hurt were working at the engines trying to get to the engineers and the firemen.

There wasn't any hurry about the engineer of the fifty-eight. Waiting wouldn't do him any harm. He had paid for forgetting his Wallace order, or losing himself in the storm, or whatever mistake he had made. The two firemen were jarred and bruised, but not badly hurt.

While Kitty stood there, biting her lips and trying to keep from interfering with the men in their work, they took Billy, unconscious, from between the tender and the cab.

Poor little Kitty! She was pretty game to follow them into the telegraph office without speaking a word, when she didn't know whether he was dead or living. They laid him down on a bench, and while one of them ran for a doctor, others tied a big handkerchief around one of his legs and covered it with an overcoat.

That was all Kitty could stand. She put them aside and knelt beside Billy.

"I'm his wife," she says — and she meant it!

She called for water and she bathed Billy's forehead till the doctor came. He looked Billy over pretty fast.

"What is it?" Kitty asks.

Just then Billy opened his eyes.

"Why," says the doctor coldly, "he's pretty badly hurt. Can't tell much just now. He'll lose a foot, anyhow."

As the doctor goes to the phone to call a buggy to get Billy to a hospital, Billy lets out a long, low moan. Kitty puts her arms around him like he was a sick kid and she was his mother. He opens his eyes again, and looks at her cold, pale face with the tears frozen on it.

"I tried to swing you down, Billy," she says.

Right there his first thought seemed to be of her.

"Was you out in that storm?" he asks.

"I'll never leave you again, Billy," she says.

"But I'm worse than I was before," he says. "And I was a pretty bum husband then. He said I'd lose my foot."



THEY ARE HAPPY NOW.

"I tried to swing you down," she says again.

His hand kind of gropes along till it touches hers.

"Are you all right?" he asks.

"Yes," she says. "Never mind me. Does it hurt, Billy?"

"It hurts," he says. "Could you stick by me a little while?"

"I can work," she says. "I used to think what you did was your fault. That was the reason I scolded you. But this wasn't your fault. I'll never leave you again."

And she never did. They began life anew, and Heaven sent them a little angel to bind their contentment. They are happy now.

INCREASED OPERATING COST.

THE cost of many important articles of supply used by the railways has increased more than 100 per cent. Fuel for locomotives constitutes about 11 per cent of the cost of operation.

Owing to the increased price of coal during the last ten years, which in some States has amounted to as much as 56 per cent, it is asserted that for \$1 spent for locomotive fuel in 1897 for each \$17.25 of gross receipts the ratio has declined in 1907 to \$1 for each \$12.93 of gross receipts.

The expense of taxation is shown to have in-

creased from \$235.36 a mile of line in 1897, to \$353.09 a mile of line in 1907, over 50 per cent. The cost of regulations, both State and national, which is classified akin to taxation, has also added greatly to the expense of the carriers.

A conservative computation discloses that the costs due to increases in expenses or reductions in revenue imposed by statutes, or by commissions acting under Federal and State regulatory laws cost the railways of the United States \$100,000,000 per annum.—*Erie Railroad Employes' Magazine*.

Flashes from the Headlight.

CONTRIBUTED BY OUR READERS.

Railroad Stories That Are Spick-and-Span and New, Just from the Shops.
The Editor Is Looking for Some More.
Can You Send One?

AWFUL:

O'HARE was a section-foreman. He was showing a friend, who had just arrived from the old country, his section. They finally reached a tunnel, and, as they were walking along, a train came rushing by at high speed, passed them, and dashed into the tunnel with a great roar.

O'Hare's friend gazed after the train with open mouth and staring eyes.

"Well," said O'Hare, "what do you think of this road? Don't you think I have a well-kept section of track?"

"Yis, indade," said his friend, "but, holy snakes! Just think what an awful calamity it would be if the train should miss the hole!"

HIS ANSWER.

SOME twenty years ago, E. O. Davis, now a passenger conductor on the Frisco, was a local freight brakeman. Mr. Davis always possessed a well-developed vein of humor.

His train had taken a siding and his restless spirit took him to the front end on a tour of inspection. He found a warm oil-box on the engine-tank. While it was not his duty to doctor defects on the engine or tank, he realized that all the box needed was a little oil.

Accordingly he asked the engineer for an oil-can, thinking he was doing him a favor. The engineer was grouchy, and, thinking the hot box was on a car, said:

"Ain't got no oil for brakemen. If you can't run her, set her out."

Davis said nothing, and did less. At the next stop, twelve miles away, the box was blazing, the journal was cherry red, and the brass broken. A new brass was absolutely necessary to avoid cutting the journal. The engineer and fireman proceeded with the work of jacking up the box, extracting the broken pieces of brass, and cooling the journal. After placing the new brass in place, they looked about for packing. There was none on the engine,

as usual, and the engineer turned to Davis, who was an interested onlooker from a nearby pile of ties, and said:

"Get me a bucket of packing from the caboose."

Davis, without changing his comfortable position, answered:

"Ain't got no packing for engineers. If you can't run her, set her out!"

A "NEAR ORDER."

THE following "near order" of the railroad commission of Arkansas indicates the impressions of the efficient secretary of that body regarding the recent inspection of the Tyronza Central Railroad, a tap-line some fourteen miles in length. It proves that the author has a keen sense of humor:

2310: Tyronza Central Railroad: Petition for additional train service and depot facilities at Lepanto (wherever that is).

In compliance with Section 2 of Act 338 of the General Assembly of 1907, requiring that the Railroad Commissioners of this State make a personal inspection of conditions complained of where a petition is filed with the Board; Commissioners W. A. Falconer and J. W. Crockett having held a special meeting at the town of Jonesboro on June 22, and after disposing of all matters on the docket at said special meeting, said Commissioners be thought themselves of the above-styled petition.

And the secretary of the commission—one Floyd—being also in the town of Jonesboro was called in by the commissioners aforesaid for a conference on the matter of inspection of the above-named railroad. (In reality this is not a railroad but a disease, and will be so referred to hereinafter.) On this June 22, it was decided to leave hope behind and proceed to inspect the two streaks of rust commonly referred to as the Tyronza Central Railroad, the objective point being the city of Lepanto, said to be in this State.

The journey to comply with the law and uphold the same was begun at about two o'clock P.M., the commission being accompanied by Mr. J. F.

Simms, superintendent; one Charles Baltzell, trainmaster; one engineer, commonly known as "Pink," and a couple of seasoned railroad gentlemen, one of whom shoveled coal at the behest of "Pink," the other being labeled "conductor," also being present one traction engine numbered 75, one ordinary caboose, and one Pullman caboose—the last named being the private car of said Baltzell.

After proceeding through the County of Poinsett and through the tall and uncut grass at a very fast and furious rate of speed—a part of the time the caravan used the public road, and at other times was by accident on the rails of the trunk line referred to as the Tyronza Central Railroad—the water-wagon (sometimes called tender), of engine No. 75 bucked at a point in the jungle some five miles from the life-saving station of Marked Tree, Arkansas, where a couple of hours were spent very pleasantly in coaxing old No. 75 to respond to the lady-like touch of "Pink," the nobby chauffeur, who the while had been humming, "I Don't Know Where I'm Going—But I'm On My Way."

At this stage of the inspection, the Railroad Commission of Arkansas held a brief but important session in the tall and uncut, and passed resolutions to the effect that it was beneath its dignity, and also an infringement on the rights and powers of the county judge of Poinsett County, to inspect the dirt roads and bridle paths in said county, and the secretary was directed to enter an order for the arrest of the officials of the Tyronza Central Railroad under the Pure Food Act for not producing a railroad to inspect after advertising in the "Official Railway Guide" that there was such a road in existence.

W. E. FLOYD,
Secretary.

Not by Order of the Commission.
LITTLE ROCK, ARKANSAS, July 1, 1910.

AS THE BOOMER TOLD IT.

HERE is a boomer brakeman's description of a head-end collision. It is told in his own language:

"The hog-head was a greasing the pig, the taller was cracking the diamonds in the tank, the con. was flourishing the tissues in the dog house, the hind shack was doping the hub of a hot-box, the head shack was beating it down the main with a red, and I was bending the rails, when they hit."

THE LIMIT.

THE long freight had left Grand Junction. On nearing the first water-tank, the fireman asked the brakeman to take water for him as he wanted to clean the ash-pans. When the engine came to a stop, the fireman took the slide hook and jumped to the ground. He pulled the slides out, but as nothing in the way of ashes fell out, he put the hook through the air-holes to poke them out. Suddenly he prodded something soft. So he lit his torch and investigated.

In the pan he saw a tramp curled up taking things easy. The fireman started to "bail the bo."

"Well, of all the nerve—you are the limit! What are you doing in there? Get out! Beat it!"

The bo simply put his finger up to his lips and said:

"Sh-h! Sh-h! Don't make so much noise. My partner's in the smoke-stack."

UP A TREE!

THE following report was recently made by an engineer on the Grand Trunk Pacific. It is given here just as it was turned in.

GRAND TRUNK RAILWAY SYSTEM.

MOTIVE POWER DEPARTMENT.

ENGINEER'S OVERTIME TICKET.

No. 16..... District — Middle.....
Division, Jan. 23, 19— Engine No. 557.....
Train No. Ex.....Kind of Train—W.
Frt. From — Hamilton.....To—Mimico
..... Ordered 11:15 A.M.....Left 12:15
P.M.Arrived 2:15 A.M..... Time
occupied—15 Hrs. — Mins.Detentions allowed afterHrs. Mins. Engineer—
Wm. Sutterby. Fireman—Thos. Nevells and Wm. E. Shauntz. Conductor—Carmichael.

STATION AND EXPLANATION.

	Hrs.	Min.
Hamilton, block and orders.....	1	—
Waterdown; chasing cattle and waiting conductor who was up a tree with bull under him, had to shoot bull to release conductor.	6	—
Burlington Junction, shunting and orders and waiting fireman.....	2	—
Bronte, shunting		20
Port Credit, orders.....	1	—
Signature of Engineer—WM. J. SUTTERBY.		

DIDN'T SEE THE POINT.

TWO young Irishmen who had recently arrived in this country bought railroad tickets to Boonton, New Jersey, but made a mistake and boarded a train for Montclair, New Jersey. The conductor, on collecting the tickets, explained the mistake and told them to get off at the next station and wait for the Boonton train.

Thinking that the next train that came along was the one they wanted, they boarded it, and were again told that they were on the wrong train, and were forced to get out at the next station and wait for the Boonton train.

By this time, the men were quite worked up over their experience and were using some pretty bad language when they entered the next train, which was bound for Boonton. A clergyman who was sitting in the seat in front of them, heard the

awful language, and, turning in his seat, said: "Young men, do you know that you are on the road to hell?"

"Begorry, Mike," cried Pat, "if we're not on the wrong train again!"

And they started for the door.

DO YOU WANT A JOB?

OUT in the Middle West, the following application has been going the rounds. If you want a position on the K., K., K., K., and K. Ry. Co., *don't* fill it out and mail it:

THE KALAZAMOO, KANKAKEE, KOKOMO, KENTUCKY, AND KANSAS RAILWAY COMPANY.

APPLICATION.

Instructions: Fill out the spaces provided for the answers below with due care, being careful not to spill less than two bottles of ink over blank, and write so it cannot be deciphered without aid of at least three expert penmen.

Application for position as.....
Name, when sober.
Name, last time you worked
 for this road.Married (Yes
 or No)..... If no, why?
 If yes, why?..... Do you
 belong to the Can Rushers' Union
 If no, why?..... Do you think it proper
 to let tramps ride without paying?.....
 If so, why?..... Do you think the
 company should receive any of the money col-
 lected thusly?..... If so, why?

N. B.—Fill out and give to trainmaster. You will be given a job, anyway. This application is just a matter of form.

OSSIE McSMYTH,
 TRAINMASTER.

SOMETHING DID HAPPEN.

A WITNESS in a railroad case at Fort Worth, Kansas, was asked to tell in his own way how the accident happened. He said:

"Well, Ole and I was walking down the track, and I heard a whistle, an' I got off the track and the train went by, an' I got back on the track. I didn't see Ole, but I walked along, an' pretty soon I seen Ole's hat, an' I walked on, an' seen one of Ole's legs, an' then I seen one of Ole's arms, an' then another leg, an' then over one side, Ole's head, an' I says, 'Great stumps! Something must have happened to Ole!'"

WHAT DID HE SAY?

AFTER many years of work on the section, Murphy was given the gates at an unimportant crossing. For several days all went well. Murphy thought he had the best job in the world.

One night, No. 41 was late, and Murphy was anxious to get home to his supper.

Just after dark, the train was heard in the distance. She came along as if the engineer intended to make up the lost time even if he did fracture the speed ordinance. As the headlight showed up around the curve, Murphy got out his red lantern and swung it frantically.

The engineer applied the brakes, the sparks flew from the wheels, and the train came to a stop shortly after the engine passed Murphy. The engineer ran back to see why he was stopped, and before he had time to ask the question, Murphy began:

"You're late. What in thunder kept ye'?"

HE WANTED A DUMMY.

AN engineer who was pulling a long freight was obliged to come to a stop. He discovered that he needed a dummy—a short piece of hose used for long couplings—so he ordered his fireman back to the hut to get one.

The spade wiggler was a green lad and didn't understand. When he reached the caboose, he said to the con. and the hind shack:

"The engineer wants one of you."

"Which one?" asked the con.

"I don't know which one," answered the green lad. "You both had better come along."

The three hiked along to the front end.

"Did you bring that dummy?" yelled the engineer, as they approached.

"Yes, I brought two!" glibly replied the fireman.

FELT IT SLIPPING.

ONE of the agents on a railroad in Washington wanted a week's vacation and, as the road did not have a regular relief agent, the old man hired a boomer operator to relieve the agent. The boomer did not savvy accounts to any great extent, but, as it was only a tank station, it was thought that he would get by without sawing, so he was told to go to it.

The day after he was checked in, the old man happened along and asked him how he was getting on with the work.

"Oh, fine!" he replied, "why I've got it right by the tail."

That sounded encouraging, and everything was all right until the new agent began to struggle with his monthly balance sheet. Then he found himself up against more kinds of grief than he had ever known.

After putting in a full day and getting more to the bad every minute, he sent this wire to the super:

R. C. B. DS.:

Disregard our conversation of yesterday.
 Feel it slipping. T. F. D.

IN THE HORNET'S NEST.

BY DAN DUANE.

Philip Has an Encounter in the Night,
Then Tries to Prove His Innocence.

SYNOPSIS OF PREVIOUS CHAPTERS.

AMONG the mountains of southern California, lived old Eugene Caillo, gold-miner and miser. To him had recently come his dead sister's child, beautiful, eighteen-year-old Carmita. In the course of events, Philip Garrick, master of the Rancho Buena Vista, visits the store kept by Caillo, and meets Carmita, who is much sought by all the men of the neighborhood, among them being Jim Gormley, superintendent of the Comet mine, a villainous sort of fellow, whose desire is to get at Caillo's riches through Carmita. She repulses him after Philip has declared his love. Shortly after, Caillo's body is discovered at the bottom of a sluice, and suspicion, instigated by Gormley, falls upon Carmita and Philip. Gormley leaves town but is quickly followed by Philip, who has evidence that the former has committed the murder. He finally traces Gormley to Carnullo City, where he has been stricken with smallpox and there, on his dying bed, signs a confession of his guilt.

CHAPTER IX.

The Enemy in Ambush.



Fall the beautiful towns in southern California that were baptized by the original Spanish settlers, Rosalia was the most beautiful. Situated at the base of mount Kaweah, whose snow-capped peak acted as a guide and sentinel through summer and winter, it was even more than home to the men and women who were so fortunate as to live there.

Its ever-green Spanish customs, the charming *patois* of its people, the eternal summer-time, the birds, the flowers, the beautiful women, the languorous southern nature that seemed to permeate everything—all formed a fascinating abiding-place—and such a place can only be found in southern California.

So there was little reason when Philip Garrick returned to the Rancho Buena Vista—to the girl he so dearly loved, and for whom he had hunted down the unfortunate Gormley—that either he or Carmita should want to leave for what was known only to

the people of southern California as the northland.

But the viper of abuse seemed to point in but one direction for the lovers.

A few days after Philip reached home, an ugly rumor was set afloat that Gormley had not died as Philip had described. The distance from Rosalia to Carnullo was too far to warrant the sending of a disinterested party to verify the graphic story that Philip told of the manner in which Gormley signed the confession.

Even if such a course had been possible, the expense was a matter of deep consideration; and, in the ethics of the southland, Philip's money would have been refused in payment for such an undertaking.

In the midst of these rumors—rumors that bred the foul assertion that Philip and Carmita were cognizant of old Caillo's death, and that it was obviously necessary for them to get Gormley out of the way—Philip and Carmita strove for recognition.

But, once started, the flame of public opinion is a desperate thing to check; and, before Philip knew, the very men whom he had called his closest friends were either beginning to regard him with suspicion or had turned from him altogether.

True, the lovers had some staunch friends; but now they were so terribly in the minority that, when the terrible debates that startled the town were at fever-heat, these friends were snowed under by the volume of opposite opinion.

Burning with indignation, Carmita and Philip feared that they had only one choice. That was to let Padre Gregorio, of the Mission, marry them. Then they would start for the north.

"But what would I do in that cold, far-away country, Philip?"

Carmita twined her arms around the neck of her lover as she spoke.

"I would take care of you, dearest. You would never suffer. Here we must live as the victims of mockery and abuse. You could not stand it. The roses would go from your cheeks; the sunlight would go from your eyes. In the new country we will have all the happiness in the world, and I will work to show these people how impossible they judge us."

"Do you surely think it is for the best, Philip?"

"Surely."

"Then will I do as you bid, Philip. You are all I have in this world. You are more to me now than any other thing—living or inanimate. If anything should happen to you, I would kill myself without the slightest hesitancy."

A gentle smile played over Carmita's face as she spoke these last words. It gave the keenest emphasis to her threat.

She meant it—every word.

He put his arm around her shoulders, and drew her toward him and kissed her. That was just what he would have her do. Young and strong and healthy as he was, he did not want to think that she would live if death were to call him away.

"My brave, wonderful love," he softly said.

"My own Philip," she whispered, as she returned his caress.

They walked down the path of the old 'dobe garden. At the garden they said good night a thousand times—it seemed. It was an hour for a lingering. With no noise save the hum of the night things and no light save that shed by the stars, they parted as if chains had to be severed.

"You will come to-morrow, Philip—very early?"

"Very early, dearest; very early. And, to-night, I will stop in at the Mission. Padre

Gregorio, who believes me and trusts you, will be awake. I shall tell him that we will be in the little chapel at sunrise, and he will tie the knot that will make you mine in the eyes of the law. Then, dearest, with law and love to bind us, we can never, never be separated. Good night!"

He drew away from her, and started down the winding road that led in the direction of the Mission.

Perhaps, after all, it were best to take this step. Though Carmita loved her birth-place as only a southerner can, she would soon get accustomed to northern ways, and her beauty, with his wealth and ambition, would give them position and prestige wherever they might choose to live.

The glow of future happiness filled his breast as he moved along the road. Indeed, the change was welcome. He began to plan a myriad pleasant things for the future, when the lights of the Mission gleamed a silent welcome in the night, about half a mile ahead.

Though there was no sound to indicate the presence of others, he was suddenly conscious that some one was following him.

There are vibrations that travel from one being to another if the mind of one is on the other. It is a vague and mystic wonder; but, so sure as death, it is true. Philip's mind suddenly diverted from the thoughts of his and Carmita's future happiness. In an instant he was conscious that there were one or more human beings behind him.

He turned suddenly, but saw no one.

Standing stock-still in the middle of the road, his heart beating violently, he took his revolver from his hip-pocket and placed it in the bosom of his shirt.

There was no sound. Perhaps he was mistaken.

He turned in the direction of the Mission and hastened his footsteps. Before he had gone fifty feet he was again conscious of the thing or being that, ghostlike, was trailing in his footsteps.

Philip was a brave man, but there were highwaymen in the southland, and he would take no chances.

With lightning-like agility he drew his pistol from his shirt and turned.

A figure darted into the chaparral to his left. He judged that it must have been at least a hundred feet from where he stood.

He could not tell whether it was a man or an animal.

"I'll find out just who you are," he said,

as he started down the road in the direction of the vanished figure.

He cocked his gun and held it over his left forearm.

With the steady step of one who knows no danger, Philip reached the clump of bushes behind which the figure had disappeared.

He halted by the roadside, straining his ears for anything that seemed like a sound.

In the chaparral all was darkness. He could see nothing; and even though he strained his eyes for the faintest sound, there was nothing—nothing save the plaintive chirp of a cricket.

Philip stood stock still waiting for the sound that must inevitably come if there were any living thing hiding within the range of his hearing.

Whoever it is or whatever it is, he said, it can keep positively still only just so long. It must move sooner or later.

Then the underbrush rustled.

Not ten feet from where he stood there was the unmistakable sound of something moving in the leaves.

"Who's that? Come out!" shouted Philip.

He spoke with the full force of his voice. Then he let the trigger of his revolver down gently under the pressure of his thumb, and cocked it sharply. The sharpness of his voice and the sharp cocking of the revolver would tell the man hiding in the chaparral—if it were a man—that Philip was not afraid, and that he was armed.

The rustling stopped.

"Come out of that!" Philip shouted again.

His words were followed by a faint noise. Then a twig snapped sharply; then the heavy crunch of a booted foot.

Philip fired in the bushes at his feet and stepped back into the middle of the road.

"Come out!" he shouted again. "I am going to shoot!"

The command was heeded.

A man stepped out from behind the chaparral. He was bending over, and he carried a knife.

"Up!" said Philip, leveling at him.

The man did not seem to pay any heed. Philip again ordered him to put up his hands.

"Not so quick, Mr. Garrick!"

The voice came from behind Philip.

He half turned. A second man was approaching.

9 R R

This man was armed with a revolver.

"Not so fast, Mr. Garrick," the second man said with a slow drawl, "and don't be so handy with that gun."

"Who are you?" asked Philip.

"Just who I am is none of your business—at least, not at present," he replied.

"What do you want?" asked Philip.

As the man drew closer, Philip recognized Seth Waters, a former deputy sheriff whom the Governor had been forced to remove from office because he could not quite explain his connection with a certain hold-up.

As Philip recognized the man he drew back, and said:

"I know you now—Seth Waters. What do you want?"

"I want to talk to you, and I want to do it peaceful-like."

"Go ahead," said Philip.

"Me and my pal," said Waters, "has come to you representing the citizens of Rosalia."

At this juncture the "pal" drew up. He had straightened up, and his knife was sheathed.

"You represent the citizens of Rosalia," said Philip. "And for what, pray?"

"Did you call on that woman, Carmita, to-night?" asked Seth Waters.

"That's none of your business," answered Philip. "Don't mention her name again."

"It is my business. And if you say you didn't, you lie!"

"What if I did?" asked Philip. The blood was rising in his temples. He would stand but very little of this sort of talk.

"The citizens demand that you leave this county before dawn," said Seth.

"And if I refuse?" said Philip.

"Then me and Dick Bender here has been voted a committee to see that you do."

Philip's next impulse was to open fire on the two men. He would have gladly taken a chance, and he was sure that he could have laid both in the dust; but with the pulse of the community at fever heat, and with the clamor that was being hurled against him and Carmita, this plan would have been most impractical.

How would he account for the dead bodies? Would the authorities believe him? Would an enraged populace rise up against him and hang him to the nearest tree?

Silence held the three men for a moment, then Philip spoke:

"You and Dick Bender are a fine pair to represent the people of Rosalia—"

"I want no comment, Mr. Garrick. Bender and me has a duty to perform, and we don't need to take any guff from you."

"I don't care to waste any words with either of you," answered Philip. "What is your plan?"

"We go down the road to Rosalia town," said Seth Waters. "In the stables of Pete Williams there is three saddled horses. We rides with you out of Rosalia down to the county line, two miles this side of Caliente—and then we says good-by."

"That sounds pleasant," answered Philip.

"And now I asks you," Seth drawled on, "do we go in peace?"

Philip thought for a moment.

"What do you mean by that?" he asked.

"I mean," said Seth, "are you willin' to go along quietly with us and put up your gun?"

"That suits me," Philip answered.

The ex-deputy and Philip slipped their guns in their hip pockets simultaneously. Bender ran his knife into the little pocket in his right boot, which he had made for the purpose.

CHAPTER X.

Over the Hedge.

THE three men started down the road. Philip walked in the middle, and Seth and Bender on either side, in the ruts made by wagon wheels.

The little light in the old Mission shone brightly through the cluster of rose-vines and orange-branches that grew in profusion around its historic walls.

Philip started at a pretty fast clip. Seth and his pal kept up without an extra breath. For the first few hundred feet, none of the three uttered a word. Finally Philip broke the monotony of their steps and the silence of the night by saying to Seth Waters, as kindly as possible:

"Seth, tell me just what prompted the citizens of Rosalia to take this action?"

Waters seemed glad that Philip had adopted a pleasant attitude; and he replied with equal solicitude:

"Well, Garrick, the people hereabouts don't quite like the story that you been tellin' about the death of Old Caillo an' that there confession of Jim Gormley's. It looks like you ain't on the level, and that you have something that you want to hide."

Philip laughed in a half-hearted way.

"I am sorry that they feel that way, Seth. But the time will come when they will understand that I am telling the truth. I will make that the one object of my life."

Seth Waters did not reply. He did not seem to care to converse further on the point that interested Philip the most, and he began to whistle some little melody that fitted in time with the measured tread of his footsteps.

They were now almost opposite the gardens redolent with the wealth of odorous blossoming plants that surrounded the old Catholic Mission.

The lamp at the outer gate burned as a welcome to all who needed shelter in the night, or to tell the passing that they might come in and pray on the marble paths that led to the cloisters.

In the darkness, neither Seth nor Bender could see that Philip was observing the place closely.

He was mentally measuring certain distances—trying to ascertain which was the object and which the shadow. The stars shine with wonderful brightness down in the Kaweah country, and illumine with a peculiar distinctness if the night is clear. Philip was accustomed to this light. In idle moments, sitting alone on the porch of his home on the Rancho Buena Vista, he had often studied the wonderful glory of this marvel of all lights—so soft, so silvery, and so clear. An old Mexican once told him how difficult it was to discern the real from the shadow in this mystic light—and he thought that he would put it to the test.

Before the men who were acting as his escort were aware, Philip stepped behind. With the agility of a cat, he dashed to the side of the road and leaped over the hedge that surrounded the Mission.

In an instant Seth Waters drew his revolver and fired.

The shot pierced the hedge close to Philip.

Down on all-fours, crouching close to the hedge, he started in the direction of the Mission buildings.

Once he found it necessary to get on his feet to dash across an open stretch.

Fear had no terror for him. He made the dash. Seth Waters's pistol again flashed on the night. He heard the bullet's thud as it struck the earth not far from him.

Seth was aiming at his shadow.

In a moment the Mission was awake. A robed form came running toward Philip. The ranchman recognized his friend.

"Padre Gregorio! Padre Gregorio!" he called, as he ran toward the priest.

Waters and Bender were close after Philip. The ranchman reached the priest, who caught him in his arms.

"Philip Garrick! What means this?" asked the priest.

"*Padre!* These men—"

Waters and Bender had come up. Waters had his pistol drawn ready to shoot.

"Stop!" cried the father, raising his hand. "How dare you raise a hand to kill on the premises of the church?"

"This man is our prisoner, *padre*," said Waters. "He is trying to escape."

"That is not so," replied Philip hotly. "They followed me down the road, and held me up like common thieves."

"He must come with us," said Waters.

"Let me stay here till morning, *padre*. I will tell you all. You believe me, I know!"

"I believe you above every other man I know," replied the good man.

"Thank you, *padre*."

"I protest!" shouted Waters. "You are interfering with the law."

"I beg that you remember to whom you are talking," said Padre Gregorio. "And I ask you to leave this place at once. Ask yourselves who established the law here."

"I am responsible to the citizens of Rosalia for this man," persisted Seth Waters.

"What does he mean, Philip?" asked the *padre*.

"He claims to be selected by the people of Rosalia to drive me out of town. I demand the treatment of a citizen and a property-holder," said Philip.

"I trust that you will not interfere with our duty, *padre*?" said Waters.

"Your first duty is to humanity, and should be tempered with mercy," the priest answered. "I know Philip Garrick, and I will be responsible for him until the morning."

The other priests of the Mission had gathered around, and as Philip chatted with them and told them his experiences of the night, Padre Gregorio escorted Waters and Bender to the Mission gates.

Against the wishes of the priest, the two representatives of the people were helpless. In those idle, early days the church had to be recognized if it took occasion to interfere in such a case. Waters and Bender started down the road, muttering curses to themselves.

"I thought you were to keep near to him to catch him if he jumped?" said Waters.

"How did I know he was goin' to jump?" answered Bender. "He went like a flash."

"Anyhow, you should have watched him closer," Waters went on with some vehemence. "It's your fault that he got away. In twenty minutes more we would have had the money."

"I didn't want to take him by this road!"

"You did!"

"I didn't! I told you to take him off into a pasture," said Bender, "and make him come to time with the cash."

"Don't argue that now," Waters broke in. "We're the ones who've lost in this game. The father will have him before the court in the morning, and we will be hauled up as a couple of blackmailers."

"If that's so, it's your fault," said Bender.

"Don't say that again! What are you going to do—skip out of town?"

"I don't see as there is much else to do," Bender answered. "If it hadn't been for you—if I hadn't listened to your fool scheme—I would have been better off."

Seth Waters was beginning to inwardly resent the taunts of his hitherto silent partner. He had picked Bender to help him "hold up" Philip under the guise that they were a committee to escort him out of town.

When they reached the border line near Caliente, their plan was to bind Philip to a telegraph-pole, demand money from him under threat, and, if he did not come to time with the cash, then they would rob him and disappear to parts unknown.

As Philip was always known to carry a goodly sum in his pocket, the two men knew that the night's work would not be in vain. It would not have been had their plan succeeded. With the first ray that smote the east, Philip rose from his couch and, walking to the offering-box in the little chapel, deposited a handful of bright gold coins—praying for the safety of his life as he did so.

CHAPTER XI.

The Escape.

THE long and the short of the quarrel between Waters and Bender was that Bender became so inflamed at his partner's words and taunts, that he foolishly called him a liar. Waters, resenting the insult, struck Bender. Bender whipped out his knife and made a lunge at the ex-deputy.

Waters had only one alternative. Before another moment flashed by, he had exercised it.

Dick Bender was a corpse.

Waters dragged the body into the brush, and leaned against a fence to think over the situation.

Three problems now confronted him.

Firstly, Philip, under the protection of the Mission, which had the respect of all, would demand in the morning an understanding as to his citizen rights. It was one thing to drive a man out of a community by sheer contempt. It was another thing to take him by force, when he was a property-holder, and claimed the protection of the law.

Secondly, he would be utterly routed and branded as a liar when it was proved that he was not the appointed officer of a citizen's committee.

Thirdly, how would he account for the killing of Dick Bender? Who would believe him if he said that he did it in self-defense? After being stamped as a liar in connection with Philip Garrick, who would agree that he had shot his mate in self-defense? He might be charged with murder—and then!

He started down the road. He made all the haste possible to reach Rosalia before midnight. The morrow would find him far away from the shadow of Kaweah—far away from the grasp that the law would reach out for him.

The scheme to get horses at Pete Williams's stable was only a bluff—but straight to this very stable went Seth Waters.

A big roan mare was grazing in one of the pastures near the road. Seth knew that she was a good jumper and fleet of foot.

A long rope dangled from her halter. Seth grabbed the end of it and, after the fashion of cowboys, he passed it through her mouth in the form of a bit, and mounted her bareback.

He trotted the mare out into the middle of the corral, then, turning her head in the direction of the road, dug his feet into her side and started at a full gallop for the fence.

It was a five-board affair, but she took it clean, and, the next instant, the roan and her daring rider were kicking up the dust in the direction of Caliente.

Seth knew that she could cover a good ten miles before she showed any sign of fatigue, and then a stop and a rest and she

would be good for another long distance.

By daybreak, he thought, he could be well out of the neighborhood—perhaps fifty miles from his starting-point.

When he came too close to Caliente to be safe, he turned his mare's head into a road that ran along the bank of the Crood River.

Though it was dark along this route, owing to the heavy growth of trees and chaparral through which the faint starlight could not penetrate, he knew every inch of the way. In harmony with the old saying, "The horse knows the rider," the mare, urged by his voice and his heels, kept up a fair canter.

So long as the night held out he was safe. In the morning, there might be cattlemen on the road who would know him, but he was not taking any chances with them.

When morning dawned, he would ride into one of the deep, gulleys that skirted the river. There the mare could rest and eat her fill of the juicy bunch-grass that grew along the bottoms, and drink the cool, fresh water of the Crood. As for him, he would live on water for a few days. Lack of food had no terror for him.

Many a time, in the old days, it had been necessary for Seth to evade the posse that was scouring the mountains for a road-agent, when he was supposed to be in Visalia on business, when he had found himself quite an adept at killing and cooking the wild birds that infest the paradise of the southern California forests.

CHAPTER XII.

A Shot Is Fired.

PHILIP GARRICK deposited all the gold he had in his pockets in the collection box that rested in the little chapel. Then he went to the first mass, for he was a devout worshiper. The humble but wholesome breakfast of the Mission priests was as a feast to him, and it was with a lighter heart than he had known for some days that he sent word to Carmita that Padre Gregorio and he had sat up late talking over the whole matter, and that Padre Gregorio had advised them not to do anything in haste.

"We will hasten into Rosalia in the morning, and I am going to have an understanding about my position before the court of justice. My defamers must come out in the open and fight. No innocent man need flee from his accusers—and you and Padre

Gregorio know that I am innocent. Be calm, and God bless you: I will be with you early in the afternoon. PHILIP."

He despatched this by a cowboy from a near-by ranch. He knew that Carmita would be up early waiting for him to take her to the altar, as he had promised. He did not tell her anything about the affair with Waters and Bender. It would only worry her, and then it was all over and only an incident. But, after all, a lucky one, thought Philip, for it threw him into the counseling hands of my good friend, Gregorio.

"Shall we walk to Rosalia?" asked Padre Gregorio. "It is a beautiful morning. Just listen to those birds sing, and see the wonderful color of those flowers!"

"By all means, if it won't tire you."

The priest was a tall, dark man, the son of a Spanish landholder whose family was among the first to locate in southern California. Athletic in every way, the walk appealed to him—and so the two companions started off, filled with the glory of the early morn.

As they walked along discussing that matter from many view-points, they came to a place in the road where the usually placid tracks of wagons and pedestrians seemed to be disturbed. The evidence of a scuffle was visible, and both men remarked that something out of the ordinary had happened on that spot.

"There has been a fight here," said Philip.

"It looks very much like it," answered the priest. "This is a rather lonely spot, and just what I imagine a highwayman would select for an attack."

Philip had raised his head, and was looking around. His eye caught a trail made by something having been dragged through the grass.

"This looks suspicious," he said, as he followed the lead.

"It does most certainly," replied the priest as he followed.

It was only a few steps to Dick Bender's body. It lay there, staring up to the morning sun.

"Great Heavens!" exclaimed Philip. "It is the body of one of the men—it is Seth Waters's pal! What do you think? How do you suppose it—"

Padre Gregorio broke the succession of Philip's questions by saying: "He has been shot! We cannot leave his body here!"

They found that they were helpless to

move it. There was only one thing to do, and that was to cover it with branches and make Rosalia with all possible haste.

Their eager muscles were soon breaking the full-leaved branches of the small trees and thick growth near the roadside. Soon they had the body completely covered, so that any who might come along would pass it by unnoticed. Then Padre Gregorio tied his handkerchief around a fence-post to mark the spot so that it would be easily found by the morgue-messengers.

They hurried on to Rosalia. A little over a mile had to be covered, but the men walked at a good gait.

They went direct to the town marshal—for he was the head of the police force—and reported the finding of Dick Bender's body.

In a short time the little town was ablaze with the awful news. The fact that the body had been found by Philip Garrick and Padre Gregorio at that early hour lent additional interest to the affair.

The court convened, and Philip went before the judge and asked that he be given the privilege to prove his story regarding the death of Old Caillo and the confession of Jim Gormley. Padre Gregorio pleaded with the court for his friend.

This was the topic on one hand, while the murder of Bender excited the other. A thousand conflicting opinions filled the streets. The courtroom was crowded to suffocation, and the little square around it was black with humanity struggling to get in.

Finally Philip and the priest appeared at the door. The crowd surged around them. Men hurled epithets at Philip, but the good Gregorio raised his hand and they were quiet.

"Tell us, Garrick!" they shouted. "Tell us, and tell the truth."

"He will tell all and only the truth," said Padre Gregorio, when order was restored. "I know this man! He is a truthful man! I believe him to the core! Listen to him. He will tell you all he knows—and it will be the truth."

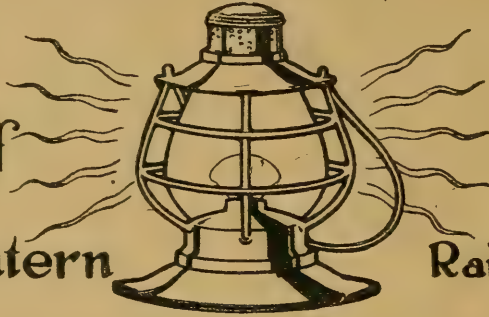
Philip came forward. He raised his hand for order. He smiled, removed his hat, and started to address the multitude. He had said only a few words about his early life in Rosalia, when a pistol-shot broke the stillness.

Philip put his hands to his breast—and his good friend, Padre Gregorio, caught him as he fell.

(To be continued.)

WHAT'S THE ANSWER?

By the
Light of
the Lantern



Questions
Answered
for
Railroad Men

ASK US!

WE like to be as useful to our readers as we can; but, because of the great popularity of this department, we are forced to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature only. Letters concerning positions **WILL NOT** be answered in this department. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials.

WHAT is the best definition of an electric locomotive?

(2) How is the power applied to these locomotives, and how are they operated?

(3) What is the voltage generally used?—O. C. H., Elmira, New York.

(1) It is a self-propelled vehicle running on rails and containing one or more electric motors, which drive the wheels, thereby propelling the locomotive and causing it to haul cars.

(2) The motors obtain electrical energy from a rail laid near to but insulated from the track rails, or from a wire suspended above the track, contact with this wire being made by a trolley or wheel on the end of a pole mounted on top of the locomotive. The electric rail, called "third rail," or the trolley wire, is supplied with electricity by generators placed in a central station and driven by steam or gas-engines or water-wheels. From the trolley or the third-rail shoe the current is conducted to a regulator or controller, by means of which the motors may be started, stopped, or driven at any desired speed. Electric locomotives are built either with motors mounted so as to drive the axles through the medium of gear-wheels, or with the motor armature mounted directly on the axle. In this latter case, the motor is called a gearless motor.

(3) The pressure or voltage at which electric locomotives are operated is 500 to 650 volts, direct

current; and from 1,800 to 3,000 volts if alternating current is used. If by alternating current, a transformer is placed on the locomotive which lowers the current of the trolley wire to a voltage suitable for the motors. For certain purposes, electric locomotives are built to be operated by a storage battery. This arrangement is only practicable for yard or switching work, where the battery can be conveniently recharged from an electric central station.

WHAT should be done if the packing should blow out of the throttle stuffing-box while on the road?

(2) About how many stay-bolts are there in the average locomotive boiler?

(3) When the term "boiler brace" is used, what does it mean, and how many are there in the modern boiler?

(4) If the blower should become disconnected how would draft be created on the fire?

(5) How can it be found whether the double-heading pipe exhaust-port in the No. 5 "ET" equipment is stopped up, and what should be done in order to double head if this were the second engine?—R. K., Indianapolis.

(1) It would largely be a matter for the good judgment of the engineer. The packing seldom, if ever, blows completely out without some preliminary warning, whereupon the gland should be

drawn up as far as it will go not to interfere with the movement of the throttle rod. Then it is very seldom so bad that an old coat or bag thrown over the gland will not suffice to make matters bearable, especially with a passenger-train, until you can get in. In the case of a work-train, however, or a freight-train with a long distance yet to go, circumstances might justify blowing the steam off the engine after getting into clear and repacking the throttle with strips of old air-hose or anything of the kind which you can find.

The writer has frequently seen this done on Mexican roads, and some in this country, where the throttle gland was located on top of the boiler or in the dome, it only being necessary to deaden the fire a little, and after filling up the boiler pretty full—at least, so that it will be well over the sheet while the work is being done—blow the steam off through the steam-chest relief valves. It does not require more than a very few minutes to repack the throttle, whereupon it only remains to get the engine hot again and proceed. These are, however, extreme instances, and are scarcely, if ever, necessary or justifiable, as has been said.

(2) Eliminating from consideration the radial stays and considering the stay-bolts proper—that is, the short bolts in the side sheets, back-head and throat-sheet—the number usually runs from 750 to 1,100, dependent on the size and shape of the fire-box.

(3) "The Locomotive Dictionary," compiled by the American Railway Master Mechanics' Association, and accepted as the authority on locomotive nomenclature, defines boiler *bracing* as "the system of stays and braces used in a boiler to enable its plates to resist the pressure imposed upon them by steam." It thus might be inferred that the term is of broad application to include sling-stays, radial-stays, stay-bolts, etc., but in the shops the name "brace" is generally supposed to specifically designate the braces which extend from the back head to the upper shell; from the throat-sheet to the lower shell, and from the front flue sheet to the shell.

These may run as high as fifty in a boiler, dependent upon its design, and are generally pinned to a riveted foot on one end for flexibility, and riveted on the other. Some designs have a "T" iron riveted on the back-head to which braces are pinned to radiate to various points on the shell. In instances where it is possible to brace the dome on account of its location toward the rear, the writer has heard these braces referred to frequently as "dome stays." There is far from being a uniform understanding among shopmen, at least, regarding the names of these parts.

(4) The blower is unnecessary while the engine is under steam, as the draft is created through the outlet of the exhaust steam through the stack. If it should become disconnected while the engine was not in motion, there would be no artificial draft; in fact, no draft other than the natural one through the stack. It could be created readily enough, however, if appliances were at hand, by piping from another engine or putting a stack-

blower in the stack. Under such conditions the best move would be to repair it if time permitted.

(5) In double-heading when the engineer on the head engine sets the brakes and cannot release them on the second engine, which is the way we interpret your question, the trouble is that port "u" is stopped up in the automatic brake-valve, as this port is not used much and is liable to stop up. In this case we would disconnect the double-heading pipe, or release could be effected through the independent brake-valve.

(6 and 7) You do not mention the style equipment in the question regarding handling the uncharged cars. There is practically no limit to the number of air-cars which can be handled—all that the engine can pull at any rate.

A. O. K., Waycross, Georgia.—(1 and 2) Yes. (3) There might be a good chance to get on as a hostler, but little, in our opinion, as a switch engineer.

(4) We have no data in regard to colored firemen, but pretty sure that there are none employed in Arizona or the Dakotas.

(5) The Far Southwestern States should present the best field.

G. E. M., San José, California.—After a very careful review of your problem, it would appear that if the first-class train reaches "A" at 12.02 A.M., or, as you put it, 47 minutes late, it has caught the new "book" and would be accordingly handled by the despatcher over the new route which takes effect with the change of time. This, of course, is merely our personal view. The movement under such conditions would be handled, no doubt, through orders to all trains involved. We do not believe that an extra would have the right to run against the first-class train from either "B" or "C" without orders.

WHAT was the circumference of the drivers of the 999?

(2) What is the difference between an outside and an inside coupled locomotive?

(3) What is used mostly for headlight—electricity or oil? If electricity is used, where is it made?

(4) What is the approximate cost of rolling stock, freight and passenger?—M. A., Newton, Iowa.

(1) Eighty-four inches in diameter: circumference 263.89 inches. See reply to J. P., this month.

(2) Outside coupled locomotives, which is the prevailing construction in this country, have their cylinders outside the frames, and the power is applied through the medium of the pistons, cross-heads, and main rods to the main driving-wheel at the crank-pin. Inside connected locomotives have their cylinders between the frames, thus necessitating a cranked main-axle, to which the power is applied through the above mentioned parts.

This latter design was standard in England and, in fact, all over Europe for over half a century, but notable departures are in service along the lines of American practise.

The London and Northwestern and the Great Western have both practically adopted outside cylinders as standard. The principal advantage claimed for the inside type was greater stability when in motion, due to the thrust of the reciprocating parts being almost directly in line with the center of the locomotive. This, whether it amounted to anything or not, was completely offset by the increased cost of maintenance due to the inaccessibility of the parts when inside connected.

(3) Oil headlights are in the majority, the proportion being about four to one electric. The latter are electric arc-light, the current for which is supplied by a small steam turbine and dynamo unit. This is placed on the boiler and takes steam therefrom.

(4) Assuming that your question relates to broad-gage equipment, the approximate cost would be as follows: Passenger-car, \$8,000 to \$10,000; box, \$3,800 to \$4,500. Wooden gondolas, of different types, with steel underframing may be assumed to cost from \$1,200 to \$1,600. Pressed steel cars are worth about \$2,000. Locomotives will average about \$18,000 for either class of service.

A. G. C., White River Junction, Vermont.—We cannot think at this writing of any railroad employing firemen or trainmen eighteen years old, but many have done so. Twenty one years is now the general minimum limit, especially in the instance of firemen, as the work has grown proportionately with the increased size of the engines in the past few years so that it is doubtful if a person under age would be physically able to handle it.

J. H. W., Goldfield, Nevada.—Any watchmaker in your vicinity will explain your questions about the hands of a watch. They are not of sufficient general interest to reproduce in this department.

HOW much coal will a locomotive burn per hour?—G. W. B.; Oakes, North Dakota.

Do you mean a locomotive employed in light passenger service or in heavy express work; one in way-freight service or fast or slow main-line freight service, and is a compound or a simple engine incorporated in the question? These are necessary elements to be defined before any attempt could be made to return an answer of any value. The amount of coal burned depends upon tonnage, speed, gradients, and curves, steaming qualities of the locomotive, quality of the coal, and, last but not least, the skill possessed by the fireman. In heavy and fast passenger service, say from six to eight cars at fifty miles an hour, about six tons per hundred miles will be readily con-

sumed. In heavy freight, or "drag" service, this might reach ten tons, while a switch engine could possibly work twenty-four hours with no more than three tons. Too many conditions remain to be reckoned with before any real information can be given on this interesting point, but with a reasonable amount of data a close estimate could be made of what a locomotive should burn.

WHAT is the pay of both engineers and firemen on passenger and freight trains?

(2) Does an engineer lose his position if his train is wrecked for no carelessness of his own?

(3) Are the engines that handled the Empire State Express in the year 1893 still in service?

(4) In what year was the speed of seventy-five miles an hour first attained by a train?—J. P., Wilmington, Delaware.

(1) As we have frequently explained in this department, *the pay of engineers and firemen is entirely dependent on the agreement which their respective organizations may be able to make with the railroad companies.* There is no real uniformity, because some men are more clever than others in talking these things over, and naturally drive a better bargain. When the contract or agreement is made it generally stands about two years, or, maybe, three years, whereupon a new agreement is formulated, thoroughly discussed, and signed by both parties, after both parties, of course, have made mutual concessions. In the East; that is, say, east of the Mississippi River, the pay of passenger engineers is approximately \$3.85 per hundred miles. If the run is longer than one hundred miles each additional mile is paid for, usually at the same rate, or on the same basis. This arrangement prevails in the instance of both engineers and firemen, whether in passenger or freight service. Passenger firemen in this same territory average \$2.25 per hundred miles. Freight engineers receive an average of about \$4 per hundred miles, and freight firemen, \$2.50. West of the Mississippi River, the pay will be found improved in either branch of the service. On passenger runs, the engineer may draw \$4.50 per hundred miles; in freight service, \$5 or more. The pay of firemen in the West, in many instances, almost equals that of an engineer on some Eastern roads, rising to \$3.35 in freight, and \$3 in passenger service. The above, of course, are broadly drawn figures, but they should serve to give the general information which you desire.

(2) No, he is exonerated through the circumstance which you mention.

(3) The 999 ran this train in the year which you mention, and is still in service on the Rome, Watertown, and Ogdensburg division of the New York Central. (See *THE RAILROAD MAN'S MAGAZINE* for April, 1910, page 553, for the complete history of this locomotive.) The schedule speed of the Empire State Express is about forty-five miles an hour. The 999 has been rebuilt with a new boiler since she hauled the Empire, and

her driving-wheels have been reduced in diameter from 84 to 70 inches.

(4) There are any number of locomotive speed records on file, but, unfortunately, they mostly lack the elements to make them entirely credible. However, on November 18, 1892, the Philadelphia and Reading Railroad ran a train from Jeakintown to a point five miles beyond, in 3 minutes flat, or at the rate of 87.8 miles per hour. This, of course, is the average time. There are few statistics available for single miles, and it is safe to say that 75 miles an hour for an isolated mile was made many years ago. We have another record on the Philadelphia and Reading, made on May 9, 1884, between mile-posts 34 and 48, New York division, in which the 14 miles were covered in 11 minutes 18 seconds, or at the rate of 75 miles per hour. This is about as complete as your question can be answered, as probably no one can say when that speed was first attained for a single mile.

G. T. S., Three Forks, Montana.—It makes absolutely no difference whether the baggage car is at rest or in motion, as the dynamo-shaft will be carried in its bearings exactly the same way under either condition. Both shaft-bearings have an equal progressive motion with the car, and the shaft itself may be practically regarded as in a state of rest within the bearings.

WILL you please tell me how far a steam locomotive can travel with one supply of fuel, and without any stop whatever?—H. L., Philadelphia.

What type of locomotive, and how much steam pressure does it carry? What is the fuel capacity of the tender? Has it a train behind; if so, what is the approximate weight of the latter; or, is it running light without any train? Do you mean with one supply of fuel in the fire-box? If so, what are the dimensions of the latter, and, in particular, the grate area? Or, do you mean with the tender fully supplied with fuel? We have to be in possession of the majority, at least, of this data before we can do much toward a reply. See answer to G. W. B., this month.

C. C. H., Mechanicville, New York.—There are several types of electric locomotives capable of hauling a fifteen-hundred-ton train up a grade of twenty-six feet to the mile. The Baltimore and Ohio Railroad motors, first put in service in 1893, have been pulling the heaviest freight-trains (including the steam locomotive of the latter, which *does not assist*) through the belt-line tunnel under the city of Baltimore up a considerably heavier grade than that which you mention. On one occasion, one of these engines pulled twenty-nine loaded cars, two engines, and a caboose, the total weight aggregating over 2,000 tons. In the majority of instances, however, where the ton-

nage is heavy and the speed comparatively high, it is considered preferable to use two motors. This is the practise on the New York, New Haven, and Hartford Railroad, the most prominent example of electrification in this country, whenever its express-trains reach over six or seven cars.

WHAT is the actual value of a Mallet articulated compound passenger-engine and freight-engine of the "1700" and "1300" type, recently built for the Santa Fe? Are the passenger-engines capable of a high speed?

(2) How many people can a sleeper accommodate? Have all sleepers a stateroom or two, besides the berths?

(3) Is it possible for the Pennsylvania Railroad to make fifty-four miles an hour with a train of eight cars over its mountain division between Pittsburgh and Harrisburg?—J. F., Charlestown, Massachusetts.

(1) The cost, as we have been informed unofficially, was about \$25,000 each. It would scarcely be advisable to attempt to run them at any unusual speed. They were built for grade work with long, heavy passenger-trains, and each performs the work of two engines.

(2) The average sleeping-car contains twelve sections, six sections on each side of the car, and each section is composed of an upper and lower berth. Allowing one person to each berth, it would accommodate twenty-four persons in the body of the car. The majority of sleepers have what is called a drawing-room, which sometimes contains five berths. Some sleepers recently built, have sixteen sections, but they have not been generally introduced into the Eastern part of the country.

(3) It is scarcely possible with a train of that weight, although they have averaged that speed between the points mentioned with five and even six cars. If you will apply to the local passenger-agent of any railroad in your town or vicinity he will be pleased to work out the mileage for you between the various cities given.

FIFTEEN years ago, all engines when in motion had a constant ringing or rocking of their driving-rods. I would like to know how and by whom this defect was remedied.—J. T. M., Washington, District of Columbia.

The noise which you mention became noticeable when the solid end, or bushed side-rods, were first introduced about twenty or twenty-five years ago. They were not so neat to the pins after a certain amount of wear as the former style strap-rods, there being no provision for taking up the wear without renewing the bushing. In consequence, they rattled somewhat on the pins through a combination of too loose fit and side play between the collars of the pin. The same condition exists to-day where frequent renewals of bushings are not made, but, as a rule, it is only in evidence when the engine is starting or running light at moderate speed. As soon as she settles down to business with her load, there is practically no

more racket than with the old-style rods, provided that the parts are accorded reasonable maintenance.

J. E. L., Canon City, Colorado.—(1) As we have frequently mentioned in this department, we are absolutely without reliable information on railroad wrecks, past or present. You might secure the information from the officials of the road, but it is doubtful if they would be willing to rattle the bones of a skeleton. Wrecks are distasteful to railroad management at large, and their memory even more so.

(2) We cannot say whether the engineer was killed or not. Why not look up the back files of some of the Colorado newspapers?

(3) The Atchison, Topeka, and Santa Fe has about 8,000 miles of road, including its leased or controlled lines; the Chicago, Burlington, and Quincy has 8,950 miles; the Chicago, Milwaukee, and St. Paul is credited with 7,286 miles, and the Chicago, Rock Island, and Pacific, with 7,414 miles.

(4) They all pay about the same in the train service.

(5) Engineers are paid by the mile, but have the guarantee of a day's pay whether one hundred miles or not have been made. After one hundred miles every additional mile is paid for according to the schedule of agreement which they have with the company. Note reply to J. P.

C. M. J., Thibodaux, Louisiana.—Our records covering high railroad bridges are somewhat obscure, but the impression is that the Kinzua viaduct on the Bradford division of the Erie Railroad, is about the highest in this country. It is something like 320 feet to the lowest point in the ravine which it spans, and it is over half a mile long.

C. C. A., Minneapolis.—Engines are changed on the Pennsylvania Railroad between New York and Chicago, at Philadelphia, Harrisburg, Altoona, Pittsburgh, Crestline, and Fort Wayne. In the instance of two or three limited trains, there may be some other arrangement in vogue, but the above has prevailed for a number of years. The longest division is from Pittsburgh to Crestline, about 190 miles. Grand Island, North Platte, and Julesburg, we opine, are the changes on the other road mentioned. If very important, we would suggest that you write to the principal offices of the company in Omaha, Nebraska.

WHAT is meant by a "boomer" brakeman?

(2) When the mileage of a railroad is given, does it mean single track or double track?

(3) Can you explain why each rail of the road-bed is connected by wires?—F. W. L., New York.

(1) A traveler from road to road; one who does not remain on any particular pay-roll for any length of time.

(2) It means length of road. For the total mileage must be added length of double, or "second" track, and length of all sidings.

(3) The current employed in the working of the semaphores controlling the electric block system passes through the rails, and these are tied, or "bonded," with wire at the joints to insure against leakage of the current.

W. J. A., Philadelphia.—In signal systems, as ordinarily arranged, the overhead or high-semaphore signals indicate the block, and the "turn outs," or switches, are indicated by dwarf semaphores or pot signals.

B. K. R., Freeport, Illinois.—The Santa Fe has one decapod (2-10-0 class) numbered in the "900's," and, also, a ten-coupled and trailing truck (2-10-2), in the same series. Both types are compound. The principal dimensions of the 2-10-0 are cylinders 19 inches and 32 x 32 inches. Working steam pressure, 225 pounds per square inch; total heating surface, 5,390 square feet; diameter of drivers, 57 inches; weight on drivers, 237,800 pounds; total weight, 267,800 pounds. The principal dimensions of the 2-10-2 class are cylinders, 19 inches and 32 x 32 inches; working steam pressure, 225 pounds per square inch; total heating surface, 4,796 square feet; diameter of drivers, 57 inches; weight on drivers, 234,580 pounds; total weight, 287,240 pounds.

The New York Central and the Pennsylvania railroads are now practically four-tracked all the way east of Buffalo and Pittsburgh, respectively. The telephone is in use on both lines for despatching purposes to a limited extent. We cannot tell whether they regard it as out of the experimental stage or not. Read the article by John C. Thomson, "Despatching Trains by Telephone," in this number, page 477.

Among the railroads that are using the telephone in train-despatching are the following:

Atchison, Topeka, and Santa Fe, Atlantic Coast Line, Bessemer and Lake Erie, Big Four (Cleveland, Chicago, Cincinnati, and St. Louis), Boston and Albany, Boston and Maine, Canadian Pacific, Carolina, Clinchfield, and Ohio, Chesapeake and Ohio, Chicago, Burlington, and Quincy, Chicago, Indiana and Southern, Chicago, Milwaukee, and Puget Sound, Chicago, Milwaukee, and St. Paul, Chicago and Northwestern, Chicago, Rock Island, and Pacific, Cumberland Valley, Cumberland and Pennsylvania, Delaware, Lackawanna, and Western, Denver, Laramie, and Northwestern, Denver and Rio Grande, Erie, Georgia, Great Northern, Gulf, Colorado, and Santa Fe, Gulf, Texas, and Western, Illinois Central, Lake Shore and Michigan Southern, Lehigh Valley, Louisville and Nashville, Marshall and East Texas, Michigan Central, Middle Tennessee, Missouri Pacific, New Iberia, St. Martin, and Northern, New York Central and Hudson River, New York, Chicago, and St. Louis, New York, New Haven, and Hartford, Norfolk

and Southern, Norfolk and Western, Northern Pacific, Oregon Short Line, Pennsylvania, Quanaich, Acme, and Pacific, Richmond, Fredericksburg, and Potomac, St. Louis and San Francisco, Salt Lake and Ogden, San Antonio and Aransas Pass, Seaboard Air Line, Southern Pacific, Southern, Union Pacific, Virginian, and Wabash Pittsburgh Terminal.

E. A. D., Stafford Springs, Connecticut.—The Grand Trunk; the Grand Trunk Pacific, and the Central Vermont railroads all have the same president, C. M. Hays, Montreal Quebec. Many of the other executive officers serve on the three roads; hence the other two are wholly or partially controlled by the Grand Trunk proper. The Grand Trunk system, proper, includes 4,745 miles; 1,175 locomotives, and 35,508 cars. It is composed of the Grand Trunk Railway; Canada Atlantic Railway; Grand Trunk Western Railway; Detroit, Grand Haven, and Milwaukee Railway; Toledo, Saginaw, and Muskegon Railway; Cincinnati, Saginaw, and Mack Railroad; Michigan Air Line Railway; Chicago, Detroit, and Canada Grand Trunk Junction Railway; Grand Trunk Junction Railway, and Pontiac, Oxford, and Northern Railway. The Central Vermont is a well-equipped railroad; mileage, 536; standard gage; 102 locomotives, and 3,139 cars. The timetable folders of these roads, published for general distribution, will provide you with maps.

J. S., Milwaukee.—Write to Walter E. Emery, secretary of the Roadmasters and Maintenance of Way Association, Peoria, Illinois. We think that he may be able to place you in the way of securing the information wanted relative to the largest hump-yard. The only one with which we are personally familiar is on the Southern Railway at Lonsdale, about two miles west of Knoxville, Tennessee. It is a yard of very large capacity and handles a tremendous amount of business, but we are entirely without reliable statistics concerning the latter.

WHAT position can a boy, nineteen years old, wearing eye-glasses, secure on a railroad, if he is sound in all other respects?—P. M. F., Brooklyn.

Clerk, stenographer, or ticket-agent's assistant, possibly.

WHICH wood makes the hottest fire?—S. C. T., New London, Connecticut.

Government experts who have been making tests recently to find out what wood furnishes the most heating when burning, have discovered that the greatest heating power is possessed by the wood of the linden-tree, which is very soft. Fir is next, and almost equal to linden. Then pine, while hard oak and other hard woods which are always believed to make the hottest

blaze, possess more than ten per cent less heating capacity than linden.

WHAT roads use the water-between-the-rails system of taking water on a fast train without stopping, and do they use this method in winter?—J. W. S., Burlington, Vermont.

Among the railroads using track-tanks in general, or in part, are the Pennsylvania; New York New Haven, and Hartford; New York Central, and Baltimore and Ohio. The winter season causes very little inconvenience to this system unless the weather is unusually severe, as the tanks are in such constant use that the ice has little opportunity to form. The principal trouble is in connection with the water-scoop on the tender, which freezes up at times and will not lower when wanted. This is guarded against by giving it a thorough test before the engine leaves the round-house. Some scoop constructions embody a steam-heat apparatus for keeping them thawed out.

J. P. S., Reading, Pennsylvania.—Can only advise, approximately, that there are some fifteen towers between the points mentioned, and, being day and night offices, must have three tricks to comply with the nine-hour law. The number of levers depends, of course, on the location of the tower. Those at East and West Junctions, Aiken, Havre de Grace, and Bay View are very important, controlling busy junction points, and no doubt have fifteen or more levers, although we do not speak with direct knowledge of the situation.

J. M. K., Steubenville, Ohio.—The red, or properly Eastlake finish, which you mention as being the standard on practically all roads fifteen or twenty years ago for painting their passenger-cars, was a good serviceable color, and we are equally in the dark with yourself as to why it seems to be gradually falling into disfavor. It is more expensive to apply than the others named by you, and this may have something to do with it in this age of economy.

R. M. C., New York City.—Address the Interstate Commerce Commission, Washington, District of Columbia.

IS there a railroad in Maine with two-foot gage? If so, what is its length, and how many cars and engines?—H. O. H., Haines Falls, New York.

It is the Bridgton and Saco River Railroad, 21 miles long; 5 locomotives, and 63 cars.

D. C., Morton, Pennsylvania.—A prospective railroad brakeman should be twenty-one years old. There are no binding requirements for height and weight, so far as we know.

A PILLAGE FOR PIE.

BY EMMET F. HARTE.

Honk and Horace Take a Tumultuous Trip Out of the Frying Pan into the Pantry.



HONK, ordinarily, with a normal liver and plenty of tobacco, is as free from whimsicality and petty peevishness as any old gent of thirty-five on anybody's list of friends. Some weeks ago, however, he woke up one morning with a blue haze on his brain, and found fault with everything.

He complained that the coffee tasted bitter, the bacon was too salty, the eggs hadn't been garnered soon enough, and the milk was blinky. Also, he mentioned a presentiment he'd had during the night, in a dream.

"I dreamed that you and me were lost in a dark and dreary wood," he said mournfully, "and that we toiled on and on, through morass and tangle, beset by every kind of trouble and danger you could imagine.

"Snakes and lizards and stinging insects swarmed after us, and creeping, crawling, and slimy things climbed up our breeches-legs or dropped on us from the dripping tree-branches overhead.

"We're going to have bad luck, Horace. Misfortune has camped on our trail; I feel it in my bones."

"I knew when you loaded up on that salmon salad last night that you'd be seeing things before morning," I said. "You remember I warned you about it."

"You wanted to hog it all yourself was the reason," he growled.

In our mail that morning was a letter for Honk. He read it, and groaned.

"Don't tell me I haven't got a clairvoyant sense," he said. "I knew we were in for it. Here's this letter. It's from a sort of aunt of mine by matrimony; my mother's brother-in-law's sister Della, who married a preacher by the name of Yarrick or Paregorick, or something. She's been left a

widow, she says, with four small brats as a legacy, and she's dividing up her time among the relations. She's got Valhalla on her list for one month, commencing next Monday. Four brats"—he held up an expressive hand with the thumb sequestered—"four of 'em, to overrun and take possession! Waugh! It's too much."

"Seems to me," I remarked, "that she's straining a point to visit you. You ought to be tickled to death."

"I am," he snapped. "I'm just gasping my last now."

"Well, then, I'll wire her that you're in the penitentiary or the insane asylum, if you say so, and she needn't come. Hotel bills for five a month would break us both up, anyhow."

He placed a cadaverous forefinger on his nose as expressive of profound mental effort.

"Better yet," he said, after a pause. "We'll take a vacation for a spell. We've been needing a rest, anyhow, my boy; you and I both—"

"You can go," I interposed. "I'll stay. We can't both leave at once."

"Why can't we? Huh! I guess yes. We've had our proboscises on the emery-wheel now for a good long while. You bet we can leave if I say so. Let me have that key. I'll have a couple of subs here tomorrow."

"Where'll we go?" I asked, after these preliminaries had been arranged. That was a point we'd overlooked. "I choose somewhere where the fish are biting," I added. Honk was rapidly becoming his old, indomitable self again.

"We'll go to my Aunt Emmy's, on the upper reaches of Big Hickory-Nut Creek," he said. "Ah, my dear Horace, my mouth

waters for some of her fried chicken and hot cucumber pickles. When I was a small urchin we used to pay Aunt Emmy a visit every summer. I remember there used always to be a jar full of spiced peaches in the spring-house, and, as I was the oldest kid by about four or five years, I always led the looters when we made a raid. Many a tanning have I got for that very thing."

After dinner we packed two suit-cases with a few necessities and a good many unnecessaries of life, and Honk indited a letter to his mother's brother-in-law's sister Della, stating that, owing to a complete collapse, mentally and physically, he had been ordered to the weeds or woods indefinitely. In short, we doubted if he'd ever come back.

"How do you spell neurasthenia?" he asked. "With a 'p,' like pneumonia? Maybe I'd better call it neurosis or neuralgia. They're easier to spell."

"Or noodle-ache," I suggested. "Tell her you have cold feet, fatigue, tired feeling, bad taste in the mouth, listlessness, nausea, and pain in the gizzard every time

you think of her, and that your expectation of life is getting shorter every minute. What's worrying me is what sort of a place this health resort is we're going to, anyhow." Honk placed his stub of pencil on a corner of the table.

"Along the upper reaches of Big Hickory Creek," he said, "life just trickles along musically. There's none of the boom and surge, the dash and turmoil, of the hurrying flood, like we're used to. They go to bed, sleep soundly, get up when they please, work or don't work, according to sweet inclination, and their days are long."

"Maybe they just seem long," I ventured. "I've stayed overnight on a farm a time or two, and they don't have much excitement, I'll admit. A swarm of bees passing over will attract more notice than a parade of the regular army in town."

"We get off at Wheaton Junction," he resumed, "and you go seven miles along a poetic country road to Aunt Emmy's. It's been twelve years since I traveled that road, but I know every pebble. I can go it blindfolded on the darkest night."



WE CAME TO A PLACE WHERE IT WAS HOT ENOUGH TO FUSE FIRE-CLAY.

"Better wire 'em we're coming," I said.

"No need of it. We can walk out and surprise 'em. I can picture Aunt Emmy's welcome in my mind. Nothing else like it. 'Well, well! Hancock Simpson, of all things! How he's grown! From a little, spindlin' strip of a boy to a big, strappin' man.' Then she'll send one of the kids for Uncle Frank, shout for chickens to be caught and killed, crocks of milk to be skimmed, and canned fruit and preserves to be brought out of the cellar. It'll be great, I tell you."

Well, we hit the trail with our luggage as soon as Honk got our substitutes well pumped up with parting instructions that they probably would pay no attention to as soon as we were out of sight. It was a sixteen-hour journey to Wheaton Junction. We arrived at that historic speck on the map pretty well toward the heated portion of the day following.

All was quiet and dusty. The sun saw us coming, and cut across the near way to meet us. Wheaton Junction is unimportant. I don't suppose it's ever even been assessed. In fact, there's nothing to it. But, then, it isn't on the P. and P., you know. I'm not intimating or inferring or impugning. I simply state that Wheaton Junction is not on the P. and P.

We struck out, lugging our suit-cases, along the unsheltered highway that Honk knew so well. A brief mention of the contents of those two suit-cases, by your leave. They contained changes of linen, underwear, socks, and so forth, of course; toilet articles, such as hair, tooth, and clothes brushes, and shaving-tools; magazines, some ten pounds or so, for light reading; fishing-tackle, including rubber boots.

Addenda—Honk's idea: Three dozen lemons for lemonade. They weigh something, too. Oranges and other tropical fruits, six or eight pounds, for the folks; tobacco for tired nerves, four pounds. Miscellaneous: Matches, collapsible drinking-cups, whisk-broom, shoe polish, extra collar-buttons, towels, soap, writing-paper, envelopes, playing-cards—oh, *et cetera!*

These things were thrown in, to make weight, as it were.

A couple of half leagues onward—our burdens by that time had assumed the weight of fully six hundred—and we came to a place where it was hot enough to fuse fire-clay. The dust rose up and smote us hip and thigh, as well as eyes, ears, nose, and

mouth. A swarm of gnats attended us, and sweet bees hung on our flanks.

"Say," I said, while we paused near the shade of a milkweed to blow a little, "that poetry you spoke about as being particularly noticeable along this line—quote me a bar or two. It ought to be pretty ardent stuff."

"Aw, go chase yourself," Honk grunted, while he wiped the perspiration from his noble brow. "I wouldn't be surprised if it should rain—it's turned so sultry. The humidity is very noticeable in the atmosphere."

"It and a few other things, yes," I said. "They make it nice. How far is it, by civilized reckoning, to the next well of water?"

"Just around the next turn," he said. "A fine old moss-covered one, too. We'll eat our lunch there, and cool off under the big walnut-tree. Attention, company! Forward, march!"

Just around the next turn there was a wheat stubble-field. The walnut-tree and the well had been misplaced. Honk looked puzzled for a moment.

"I remember now," he chuckled foolishly. "I had my wires crossed. A half-mile farther is the schoolhouse, and then we cross the creek on a red bridge. Funny how memory plays tricks on a person sometimes. The well I spoke about is on beyond that, quite a jog."

"Never mind," I assured him. "I'll drink out of the creek."

It was farther than any half-mile to the schoolhouse, though. It was nearer two miles, liberally measured, and when we got there it had been torn down or moved away. At least, Honk said it had. There was no sign of it.

We rested in the cool shadow of a thistle-bush. I estimated that the thermometer stood at one hundred and sixty-nine degrees Fahrenheit. The dogs strained at their leashes and whined for a taste of walrus blubber. We killed and ate our last Eskimo at this camp.

Pardon me. I'm crazy with the heat. Some little distance beyond where the schoolhouse wasn't we came to the creek. It was a real, *bona-fide* creek. We lowered ourselves down the weed-grown bank to get a drink.

The water was brackish to the taste and somewhat hotter than lukewarm. It was covered with a rich, dark-green scum. We

rested for half an hour under the bridge. A buggy passed, but it was going the wrong way—from our point of view.

I desired Honk to dash out from our place of concealment and ask the traveler

said. "Nobody but the most ruthless of vandals would have dared lay an ax to it. Well, here we are at Aunt Emmy's at last. Phew! I do believe I smell cherry preserves. There's the same old log barn and



how far it was to Aunt Emmy's, but he refused. He insisted that he knew already, and that no man needs a corroboration of positive knowledge. A measured mile and a quarter was the exact distance, he said. As a sort of foot-note, in explanation, I will state that it took two hours' hard walking to negotiate it, however.

We tacked into harbor at Aunt Emmy's somewhere about three bells, with helm hard aport, and soused the sta'boa'd anchor. Honk was still muttering and grumbling in reference to the villain or villains that had been guilty of cutting down the walnut-tree at his dear old moss-covered well, some miles back. We didn't find the well, but we viewed the former site of it.

"That walnut-tree was a landmark," he

the pig lot, and everything just as I saw it last. Here comes the dogs. I don't see anybody stirring around the house. We'll probably find Aunt Emmy about the kitchen. Get out, you!" The latter to a yellow dog of doubtful pedigree who was maneuvering to secure a souvenir from Honk's leg.

There were three dogs. They convoyed us to the back door, whither we steered our course. A lean, pessimistic-looking woman took our measure from within. She hooked the screen door tentatively. She had the nose of Catherine of Russia, the eyes of Semiramis, and a Hapsburg chin.

"Why, Aunt Emmy," cried Honk, "howdy-do! You don't know me no more'n a rabbit, do you? That's a good one on

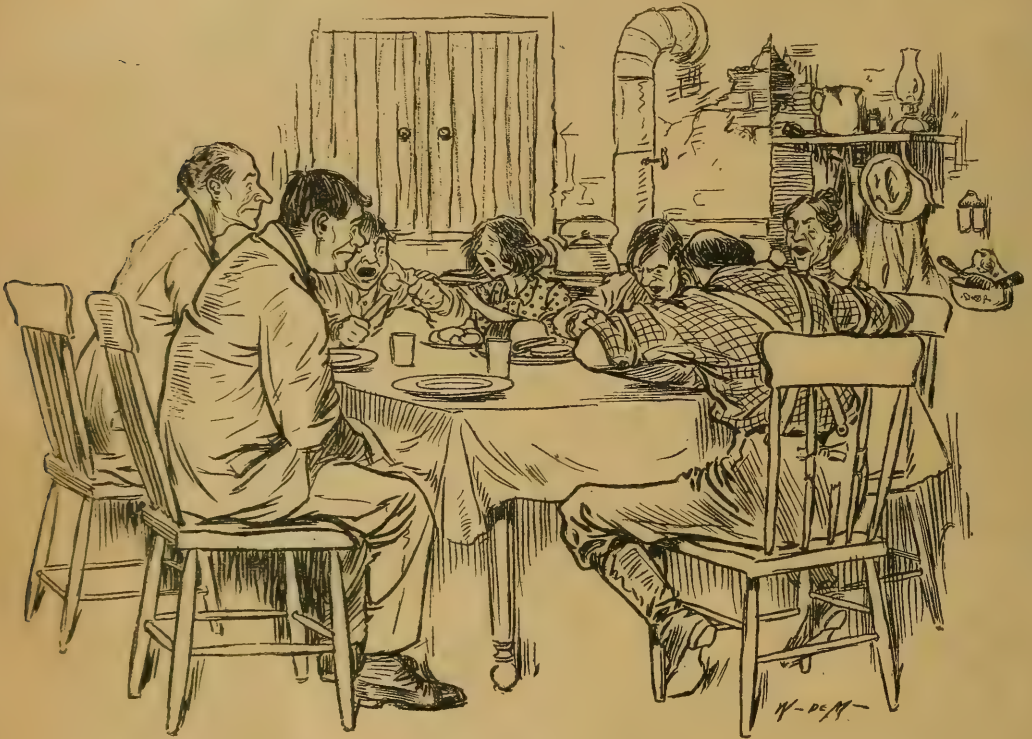
you, Aunt Emmy. You'll have to treat on that, all right. She don't know her own nephew. Horace, what do you think of that?"

"It ain't Hancock Simpson, is it?" she said uncompromisingly.

"It is," said Honk. "What's left of him.

and Sammy's gone to Kansas City. Willie and Seth are still at home; and Ruth, she's going on twelve now. They're all down on the creek somewheres, except Frank; he went to the county seat to pay his taxes to-day."

Honk brushed aside ten or a dozen flies



THEY WORKED A SKIN GAME ON HONK AND ME, BY PASSING THINGS SO THEY WOULD REACH US LAST.

How are you, anyhow, Aunt Emmy? Let me introduce to you my old side-partner, Horace. We've come all the way from Valhalla, just to pay you all a visit.

She unlatched the screen door without enthusiasm, and passed around a limp hand for us to shake.

"Set down," she invited, "if you can find yourselves some chairs. I hardly knowed you, Hancock. You've shot up taller, but you always was thinlike. When did you hear from your ma?"

"Not so very long ago. She's making her home with Clara now; Clara was the youngest girl, you know. She's married and lives in St. Paul. How's Uncle Frank making it?"

"Nothing extra. He's troubled with the rheumatiz quite a lot. Esther's married,

that were fighting for first place on his nose, and wondered if a cold drink wouldn't do us both good. I admitted my willingness to try the experiment. Aunt Emmy made no move to alleviate our sufferings. She didn't seem thirsty herself.

The house was simply swarming with flies. Their buzzing made a dull, humming sound that reminded one of a bee-hive on a busy day. Several chickens and one full-grown goose came up on the front porch and peered in through the screen at us.

"Well, let's get outside and take a look around, Horace," Honk proposed. "Don't go to any extra trouble for us, Aunt Emmy; we're just home folks, you know."

She didn't mention having contemplated any such thing.

We sought and found the well. Its hoist-

ing apparatus was of the old-fashioned bucket and pulley variety. It would have been improved by the addition of another bucket. We drank, and renewed our lease of life.

After which we observed the chickens, viewed the pigs, noted the calf lying in the barn lot, inspected the orchard, with its dozen or so gnarled and ancient seedling apple-trees, and remarked the general run-down and careless appearance of everything about the place. It was most exciting.

The fences were tumble-down, the corn-crib tottery and undermined by the rats, while broken-down and weather-beaten cultivators and other farming implements and tools littered outlying nooks and corners, and an air of poverty-stricken abandonment clung to everything in sight.

"A man with a hammer and a pocketful of nails could do some business in this vicinity," I remarked. "Not to mention paint and putty, and a mowing scythe after these weeds. There are some there as high as a horse's head."

"You're right," Honk agreed disgustedly. "Things do seem to be in need of a general shaking up. This dump is on the greased slide that leads to the bow-wows. Say, wouldn't I like to jump a gang of our boys into this rat-harbor and rejuvenate things for about a week?"

We opened a bent and decrepit gate and wandered across the pasture to the creek. No rest was there for us, for the mosquitoes nailed us at sight, and it had been a right prolific year for the species, apparently.

I saw at a glance the kind of fishing Big Hickory-Nut Creek would afford. No self-respecting bull-head would even sojourn in a hog-wallow like that for any length of time.

Two or three sad-eyed cows regarded us reproachfully from the water, where they had sought refuge from the flies. A gray horse with a string-halt stepped out from behind a clump of trees and favored us with a long, irritating stare.

We didn't see Willie, Seth, or Ruth during our ramble. We learned later that they had gone blackberrying farther up the creek, the result of their foray being a scant quart brought back in a hat. Plenty enough for a pie or two, but we didn't have pie at supper so you could notice it.

Aunt Emmy's family gathered at the festal board for supper; likewise Honk and I, distinguished guests from afar; likewise

myriads of buzzing flies that we fought hand to hand for every bite. It was a meager supper. There was bread, and some butter and water to wash it down with.

Aunt Emmy explained that they sold the cream and fed the skim milk to the calves. She remarked that we could have had eggs for supper if somebody had looked for 'em. She said the hens stole their nests out, whatever that meant.

The family had unique table manners. They grabbed for the best on every dish, and worked a skin game on Honk and me by passing things so they would reach us last. It was a case of every fellow for himself and—that's an old saw, you know the rest.

Uncle Frank was a morose old soul.

Talking seemed both painful and depressing to him. It hurt him to say anything, and when he did his spirits fell immediately. He peered underneath and saw the side they'd neglected to varnish of everything. He had a way of smacking his lips and clucking while eating that endeared him to me right away—over the left.

Not being adept at the methods in vogue at table, Honk and I came perilously near losing out entirely on our supper. It was simply a case of the family beating us to it, and they were more familiar with the ground.

If we were to dine there again, however, I'll bet you I would make a showing. I'd pounce on everything in reach, dump it on my plate, and commence chewing and growling. If necessary, I'd repel the other boarders, nautically speaking, with knife and fork, and use my nose and tongue for eating.

When the bread and butter had disappeared, the assembled company looked around hungrily to make sure that the feast was over. Then they left the table, one by one, without undue formality or ceremony. We followed Honk's cherished uncle to the porch, where he sat himself on the only chair and filled and lit his pipe. We whirled around a few times, shook ourselves, and reclined on the floor with our feet hanging over the edge.

Honk began to simmer gently, preparatory to a long and eloquent session in which, if I mistook not, Uncle Frank would hear some pointers about modern scientific methods as applied to agricultural, pastoral, and horticultural pursuits, *et cetera*.

"How much land do you own now, uncle?" Honk asked preliminarily.

"Only an eighty," after a pause. "An' it's pretty well in debt."

"Let's see," said Honk. "An eighty. Well watered and in the rain-belt. You can successfully raise here, corn, wheat, oats, barley, broom-corn, sugar-cane, and every variety of vegetable and fruit except the semi-tropical kind; besides cattle, hogs, horses, mules, sheep, goats, and poultry. Yet you say you're mortgaged. Maybe you've got a screw loose somewhere?"

Uncle Frank didn't seem impressed to the point of replying.

"The old, slipshod system of farming in this country," Honk continued, "has been relegated to the rear. We now farm scientifically. A man should figure profit and loss on every cow, pig, and hen. Eliminate the drones; watch the corners; improve, intensify, and specialize.

"Ten acres properly handled is better than a hundred acres mismanaged. Out in our country we—"

"Seth!" bawled the old fellow suddenly. "Have you milked yet?" From somewhere in the distance a voice replied:

"Naw, we-ain't."

"You boys git at that milkin' now!"

There was no reply. Presumably the boys were "gitting at it."

"Take small fruits, for instance," Honk resumed.

"An acre of strawberries will yield, at a conservative estimate, two hundred crates. At two dollars a crate, you have four hundred dollars. The cost of the crates and picking comes out, of course, say fifteen per cent; but you have left a neat sum."

"Then, there are blackberries and raspberries. The three of them, ripening as they do, at different periods, make an ideal crop venture. No venture, either; it's as certain as sunrise.

"Five acres of small fruits, rightly handled and marketed, would give you a net income of from three to four thousand dollars annually.

"Take broom-corn, potatoes, celery, onions. An acre of onions will knock the props out from under ten acres of corn the best day corn ever saw. Buckwheat and bees will beat corn.

"You ought to have a two-horse power gasoline-engine over there in the creek, and an irrigated celery-patch that would bring you in fifty dollars a week. Man, you've got a mint here, and the weeds are taking it—"

"Seth, you boys done that milkin' yet?"

Again the voice from afar: "Well," impatiently, "we're goin' in a minute!"

Honk wiped the sweat from his hard-working face. Uncle Frank seemed a hide-bound proposition withal. His redoubtable nephew made one more assault upon his outward show of indifference.

"A dozen Jerseys," Honk said, "would put you in the clear about two hundred a month. You could afford a new automobile once a year if you'd work it right. And as to hogs and poultry—they's my hobby. I—"

Uncle Frank sighed, and knocked the ashes from his pipe.

"I'll have to whale them durned boys before I can git 'em started," he said, and limped into the house, leaving us flabbergasted and alone. I rose quietly and made a dive for the chair. Honk had anticipated the move, and was a scarce two inches ahead of me, so he got it.

"Only the rich can enjoy the luxuries of life," he remarked. "But, laying perisiflage aside, we ought to get these people pried out of their rutt. Some of these days this farm will turn into a big burdock and jimpson reserve, if we don't. To-morrow I'm going to take that old man to pieces, and overhaul and oil him up until he'll be practically a new machine."

We sat on the porch until late. Nobody disturbed us. Aunt Emmy came after I had taken one nap, and reported that our bed was ready whenever we felt irresistibly inclined toward an armed engagement with Morpheus.

Our slumber-chamber was located in immediate juxtaposition with and to the kitchen; in the small of the kitchen's back, as it were, as we found when we staggered thither.

It was poorly ventilated, with one port-hole. We might have quibbled at the bed, only one should not pry into and investigate too closely the mouth of a gift horse. Besides, we were dead tired and hungry.

I'll make no comment on the bed, other than to say that I've slept—and slept soundly and restfully—on baggage-trucks, crates of machinery, floors of silvery oak, and even piles of railroad iron, but that my rest was broken on Aunt Emmy's company bed.

We turned in, Honk and I. The afore-said Morpheus spat on his hands and maneuvered for his famous toe-hold. Just before he closed with us, something happened.

Morpheus threw up his hands and fled wildly. Honk began to paw and scrape at himself.

"There's a spider or something crawling on my face," he said. "Ouch! I'm bit!"

I secured a match from a convenient vest-pocket, struck it, and looked. They were scurrying to cover in all directions; the sheet and pillows were dotted with them. When I say "they," I make no reference to spiders. I saw no spiders.

A spider is a well-mannered, gentlemanly bug—a rare artisan in shimmery fabrics, gossamer and elusive, flimsy and fine as the

May his children's children dry up, become transparent, and blow away on the wings of a hot wind!

Honk and I hopped out of bed in a hurry. Honk cooled his fevered brow at the port-hole, and then I cooled mine. There wasn't room for more than one fevered brow at a time at that particular port-hole.



HONK HAD ANTICIPATED THE MOVE.

dainty raiments of fairies. He constructs rare geometrical designs in spun silk, more delicate in texture than anything else ever woven in this world. I could sing all night in praise of my hairy friend, the spider.

But—I compose no poetry nor chant no encomiums dedicated to the rascally insect I have in mind. He is a night prowler, a coward, a vampire, and a sneak. He sallies from ambush, attacks, and scurries back into hiding.

No bigger than the mole on your neck, he has the voracity of a tiger, the capacity of a glutton, and the audacity of a brainless fool. Ugh! A volley of curses on him!

"We can't sleep in no such buggery as that," Honk whispered. "Horace, there wouldn't be a greasy spot left of us by daylight!"

"Sh-sh!" I warned him! "Somebody's in the kitchen. Hist!"

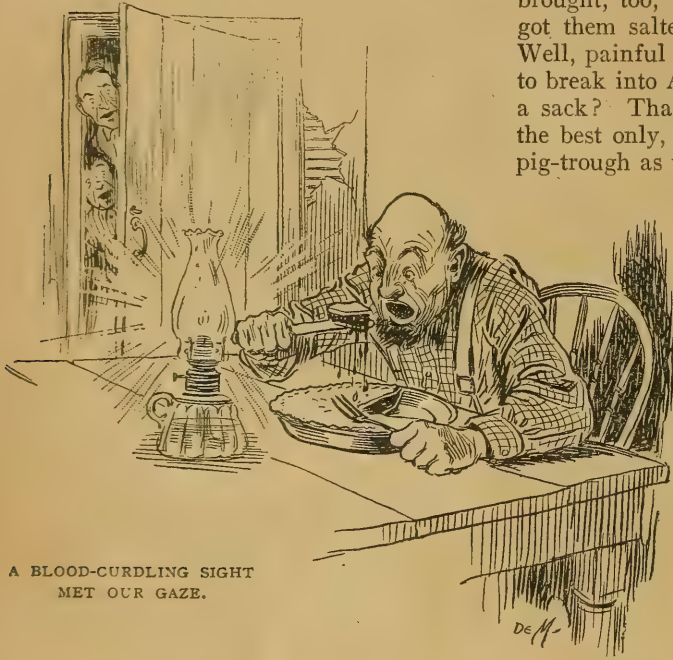
There was the sound of bare feet, spitting guardedly against the uncarpeted floor; then the faint clatter of tinware.

"Maybe some marauder has obtained an entrance and is filching the pewter," I whispered. We tiptoed across the treacherous floor, lest it creak and betray us, and opened our door a few inches breathlessly.

A blood-curdling sight met our gaze.

By the dim light of a coal-oil lamp, turned low, we descried a figure of a man bending over the table. We could see the nefarious work at which he was busy. He was just lapping up the remains of a fat and juicy blackberry pie, and—horrors!—it was Uncle Frank!

I knew him by the smack and cluck of



A BLOOD-CURDLING SIGHT
MET OUR GAZE.

his mouth. When he had cleaned the platter, he extinguished the lamp, and padded softly through the doorway leading into the front room.

Honk revived with a snort the minute he had gone.

"Let's get our duds on and get out of this," he proposed huskily. "That last was the one thing needed to break down the corral fence. No man can eat pie under my nose without offering me any, and then brag that he's my kin-folks. I repudiate 'em. I'm through with 'em. A *bas* and avault with all of 'em!"

"What about elevating 'em out of their rut?" I asked, as I laced my shoes.

"Ptt!" he sputtered, like an engine climbing a flight of steps on the high speed. "I don't waste none of my time with such swine! I don't think! Get the grips outside while I take a look for something to eat. Maybe I can unearth another pie."

I returned without unnecessary delay.

Honk had the lamp lighted, and was making a silent but painstaking search through the larder—and to advantage!

Aunt Emmy was a deceiver. She had good things galore in concealment. A big cake, a platter of fried chicken, two or three pies and preserves, jams and jellies to make your eyes water.

"Here are those lemons and oranges we brought, too," whispered Honk. "They've got them salted away for future reference. Well, painful though it be to me, we'll have to break into Aunt Emmy's plans. Where's a sack? That basket will do. We'll take the best only, and chuck the balance in the pig-trough as we depart."

Once outside the gate and on the main highway to Wheaton Junction, we waded into that basket of eatables. Mile after mile went into the discard, but we ate our way forward. Behind us we left a trail of chicken bones, jam-glasses, and fragments of pie crust.

We were tired when we got to Wheaton Junction—yes, very tired. But not hungry, glory be—not hungry!"

When the red motor-car rolled into Valhalla next afternoon, Honk and

I were on board it. We tumbled off blithely.

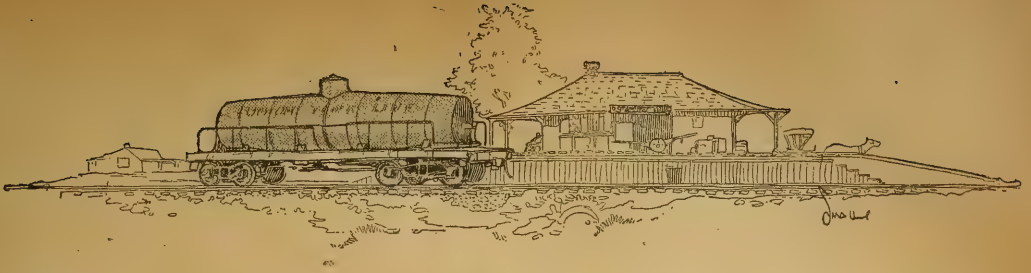
Ah, that's the kind of a town to live in! And there was the Medicine House—dear old clean, comfortable Medicine House!

"Well," I said, "we dodged Cousin Della and side-stepped Aunt Emmy and Uncle Frank! Hurrah for us! Me for a bath!"

Honk waved a greeting to one of our substitutes, who was gaping out of the ticket-window.

"Wasn't looking for you back so soon, quite," the man said. "Where'd you go? Millardsville? Say, there was a lady come in on the train this morning, and she was in here asking about you. She had four kids with her. I won't be absolutely certain, but I think she went up to the Palazzo and engaged rooms and board for a month at your expense. Your aunt, isn't she—er—er—"

"Oh, shut up!" said Honk. "Of course she's my aunt. What of it?"



The Railroads' War on Dust.

BY CHARLES-FREDERICK CARTER.

EVER since trains have been running faster than six miles an hour, a small army of inventors have been struggling valiantly to find an effective weapon to combat those ancient enemies of the traveler—dust and cinders.

Hundreds of devices have been patented to rid passenger-coaches of these products of the engine and the right-of-way, but, one by one, they have been put to the test and failed.

The nearest approach to anything like a successful ventilating system was that adopted by the Pennsylvania Railroad a number of years ago, but as it provided only one-third the amount of air that theoretically should be in circulation, it can hardly be regarded as efficient. Rock-ballasted roadbeds and the occasional use of crude petroleum on the right-of-way, however, have rendered traveling so very enduring that it can hardly be compared with the days of mud-ballasted tracks and wood-burning locomotives.

What the Railroads Have Done Toward Overcoming the Smoke and Dust Nuisance from Early Days Up to the Present Time and Some of the Results Accomplished.

WHEN the blessing of railroads was conferred upon the people of the United States, their first transports of delight were tempered by the discovery that speed was not to be had without the accompanying vexation of dust, cinders, and smoke. Immediately hosts of inventors deluged the patent-office and harried the life out of railroad officers with all sorts of impracticable schemes to abate the nuisance and, incidentally, make the fortunes of the geniuses who devised them.

This self-appointed task was handed down unfinished to their children and to their children's children. Even at the present day, though the work has been taken up by one of our greatest railroad systems, which has kept a force of experts at work on the problem of dust-prevention and car ventilation for ten long years, that particular fly has not yet been removed from the ointment.

If one keeps in mind the mud ballast, which was the only kind known to early railroad builders, and the stuffy, cramped, unventilated boxes that passed for cars, it

is not difficult to accept this description of conditions from the *American Railroad Journal* of June 17, 1854, as a conservative statement of facts:

"As the season advances travelers by railroad suffer almost inexpressibly by dust and heat. Those who have never experienced it can hardly realize the sensations of thirst, half-suffocation, and blindness which are occasioned by a long day's travel in unventilated cars. If you close the window you parch; if you open it for air your eyes are filled with heated cinders and smoke, while your clothes are covered and nose and throat choked with the dust you respire."

The *Cincinnati Gazette*, in the same year, declared that the dust on the railroad journey between Columbus and Cleveland reminded one of an Ohio River fog which forces steamers to tie up. "The heat," said this paper, "aggravates the sufferings of the passengers. The air is heated to the boiling point and thickened with dust until it is like gruel."

In cooler weather the sufferings of the unlucky traveler were still worse, if such were possible. Although established for the express purpose of advocating railroads, the *American Railroad Journal*, in its issue of September 12, 1846, burst out in a long tirade in which it complained that often forty more passengers than there were seats were packed into a car, while the platforms also were crowded, apparently very much like the street-cars in any big city during the rush hours at the present day.

When Travel Was Torture.

The floor was covered with tobacco-juice, orange and apple peelings, peanut-shells, and similar débris, while the windows often had not been cleaned for months. The red-hot stove gave forth assorted odors of singed coats, toasted rubbers, and smoldering quids. While untold sums had been spent for decorations, there was not a hole of any size for the admission of air.

From such conditions as these it would seem that railroad officials were driven to seek relief in self-defense. One of the earliest schemes for getting rid of dust to attract favorable attention was the joint invention of John Ross and W. E. Rutter, of Elmira. This was simply a tank having a capacity of two thousand gallons mounted on four wheels, with a sprinkling-pipe six

feet eight inches long, carried ten inches above the rails.

The sprinkler was coupled in behind the tender. The enthusiastic inventors claimed that their sprinkler moistened the air surrounding the cars, reduced the friction between the wheels and the rails, prevented bearings from heating, and protected paint and varnish, which seems a good deal to expect of fifty gallons of water sprinkled over a mile of dusty railroad, or a pint to every thirteen lineal feet of track. Great stress was laid on the ingenious arrangement by which the engineer shut off the sprinkling water with the same movement with which he closed the throttle.

Attempts to Dampen the Dust.

This track-sprinkler was tried on the Boston and Providence and the Boston and Stonington railroads, where it gave so much satisfaction that the New England Association of Railroad Superintendents, representing twenty-five railroads, of which W. Raymond Lee, superintendent of the Boston and Providence, was president, at its meeting on July 12, 1848, adopted the report of its committee on track-sprinklers, saying:

"Your committee is fully convinced of the utility of the track-sprinkler in connection with railroad trains; its use promotes the comfort of passengers, keeps the cars clean, and the bearings more free from dust. We recommend iron tanks and more water, say one hundred gallons per mile for passenger-trains at thirty miles an hour."

In spite of this strong indorsement the track-sprinkler dropped quickly out of sight and was never heard of afterward.

Other early inventors ignored the track altogether, and sought only to keep the dust out of the cars after it had been stirred up by the train. Included in the average of one dust-prevention scheme a week, presented at the patent-office for a considerable period, was a plan by Bromley, of New Haven, in 1850. He put paddle-boxes on the wheels like those on a side-wheel steamboat, to hold the dust down, and stretched rubber aprons between the cars to prevent the dust from rising.

A modification of Bromley's plan was tried on the Michigan Central. A screen of tarred canvas was hung outside the wheels from the bottom sills of the cars to within two inches of the rails. The screens were joined together from car to car, to form a

continuous tunnel under the train through which it was hoped the dust would have the decency to pass and leave the passengers alone. But it didn't. The Bromley idea was again revived in 1860 by E. C. Salisbury, of New York, with no better success.

A scheme that was tried on the Erie Railroad won the admiration of David Stevenson, F.R.S.E., an Englishman who made a couple of trips to the United States to study the railroads, the first being in 1837. The Erie car-ventilating apparatus consisted of a ventilating-hood, something like those in use on steamships, on each end of the car.

The motion of the car forced a current of air through this ventilating-hood into a chamber into which water was sprayed by a pump driven by a belt from an axle to wash the dust and cinders out. The purified air was then conveyed into the car. There was a heater to warm the water in cold weather. Stevenson found several cars so equipped, and recommended the device for use on English roads.

Devices to Catch the Cinders.

Something like the Erie plan was the invention of H. Ruttan, of Coburg, Canada. Ruttan must have been a good promoter, for he made vigorous use of printer's ink, and his persuasive powers were so great that he induced the Rochester and Syracuse Railroad to try his plan in 1853, while the New York Central and the Erie experimented with it in 1857, the Boston and Lowell tried it in 1859, and the Grand Trunk fitted up seven cars equipped with his device during the same year.

Ruttan first captured his air with a "receiving box" on top of the car, from whence it was conducted through flues in the sides of the car to a shallow tank beneath the floor. The tank was the full width of the car and sixteen feet long, and was to have one inch of water in it. This one inch of water being supposed to stay evenly distributed over the bottom of the tank regardless of the motion of the car in going around curves and up and down grades, was expected to catch all the dust and cinders and detain them by force while the purified air rose through two pipes or pedestals five feet high into the car. In winter one pedestal was closed and a stove was placed over the other to heat the air. Still, this did not answer.

A mechanic named Cunningham, of

Reading, Pennsylvania, thought the problem was not to keep out the dust, but to evict it after it had entered the car, so in 1850 he patented a scheme for blowing a jet of air across the windows by means of a fan driven by a belt from the axle working in a chute.

The Railroad Car-Ventilating Company was organized in New York in 1852 to buy and exploit the patent car-ventilating system of H. M. Paine. Experiments were made with the Paine system on the Nashua and Worcester and the New York and New Haven railroads in 1853, but they were not satisfactory.

Paine's plan, like a number of others, was to take air from the top of the car and force it over the surface of water with the expectation that the water would take up the objectionable dust and cinders. The windows being designed as a part of the ventilating system, opened vertically down the middle. The front leaf of the window was supposed to be swung out, thus forming an angle that would deflect the dust and cinders so they could not enter.

About the same time C. Lancaster patented a plan for an air-chute on top of the cars and extending the length of the train, connections between cars being made with springs just as a modern vestibule is held together. Air was taken in behind the engine before it had a chance to be contaminated, and conveyed to all the cars through the chute and side-flues in the walls of the cars.

Improved Ventilation.

Waterbury & Atwood, of Birmingham, Connecticut, improved on Lancaster's plan by taking air from the sides of the tank, farther away from the smoke as it rolled back over the train, and combining with the air-duct the first attempt at a vestibule. Although Waterbury & Atwood secured a letter from E. F. Bishop, president of the Naugatuck Railroad, declaring that, after a year's trial, their system of ventilation had proved perfectly satisfactory in operation, and though they succeeded in having a train on the New Jersey Railroad fitted up with their system, they never got any farther with it. More than thirty years later F. U. Adams, of Chicago, incorporated a precisely similar plan of ventilation in the wind-splitting train for which he obtained a patent.

In spite of all these attempts, the ventilation of cars was notoriously bad until the late '60's, when the clearstory, or monitor-roof, began to be introduced. The windows, or transoms, in the clearstory afford the nearest approach to ventilation that is to be found on most roads to-day, but this primitive device is so lamentably deficient that in 1894 the Pennsylvania Railroad detailed a commission to find something better.

Although the commission's assignment was to devise a system of ventilation, it was specifically reminded of the necessity of excluding those ancient enemies, dust and cinders. A series of exhaustive tests extending over ten years was carried out. Analyses of the air in coaches and sleepers showed that only from one-sixth to one-tenth of the air necessary to maintain good hygienic conditions passed directly through the cars.

Further experiments demonstrated the impossibility of securing true ventilation by exhausting the air from the car by way of the roof and allowing it to enter where it can. That is, an intake as well as an outlet was needed. It required an infinite amount of experimenting to get the details of the intake down to a satisfactory working basis, but it was done at last. Very early in the experiments the commission gave up all idea of securing the ideal circulation of one hundred and eighty thousand cubic feet per minute as wholly impracticable, and set the standard at one-third the amount.

The intake-hoods, placed at diagonally opposite corners of the roof, have openings of one hundred square inches. The air

passes from the hoods down through the sides of the car to ducts under the floor extending the whole length of the car. There are pockets in these ducts to catch the coarser cinders and dust. From the ducts the air passes over steam-pipes which heat it in winter, into the aisle at the end of each seat near the floor. The system, in fact, is no more nor less than a scientific development of some of the earlier failures.

Seven ventilators in the roof, one over each gas-lamp and one at each end, allow the vitiated air to escape. The windows in the monitor-roof are not made to open. A carload of workmen from the Altoona shops were paid their regular wages to ride up and down the road in one of the experimental cars to test the new system before it was accepted. The plan having withstood every test satisfactorily, the workmen reluctantly returned to their benches in the shops, and orders were given for installing the new system on a large scale.

If our fathers could make such a fuss over a little clean prairie soil mixed with their air and seasoned with wood-smoke, what would they say to the dust of the New York Subway? Dr. George A. Soper found upon investigation that sixty per cent of the Subway dust is an impalpable powder of iron which is ground off the brake-shoes at the rate of one ton per mile per month. Besides this, there is a considerable quantity from the contact-shoes and from the wear and tear of the rails. But there need be no fear of this annual output of two hundred tons or so of powdered iron blocking the costly road, for the passengers kindly carry it out free of charge in their lungs.

HORSE-POWER OF THE FIREMAN.

UNTIL the automatic stoker comes into general use, the main object and aim of improved locomotive design is to increase the net return of the fireman's work. That the Mallet compound locomotives mark a tremendous advance in this direction is generally known, but it probably is not generally understood that an advance of practically one hundred per cent has been made by the introduction of this type of locomotive; in other words, that it permits one fireman to develop practically double the draw-bar pull that was previously his maximum.

Service tests on the lines of the Delaware and Hudson Company show this fact very clearly. The Mallet, which has exactly the same amount of

grate area as the consolidation type pusher, did an amount of work equal to two of these engines with practically the same amount of coal used on one of them.

Even then this amount was not as large as firemen have shown themselves capable of handling per hour for a somewhat longer period than was required on this run. When one fireman can develop practically one hundred thousand pounds of draw-bar pull for two hours continuously, who dares to say what tractive effort will be obtained from locomotives when the automatic stoker becomes thoroughly perfected, a condition which now does not seem to be so far in the future?—*American Engineer and Railroad Journal.*

THE WEALTH OF ARTHUR WILLIS

BY S. O. CONLEY.

An Incident of the Old Stage-Coach Days Which Was Remembered After the Steam-Horse Was Born.



Y story is of the bygone days, when railroads were only beginning to be talked of, and were the standing joke of travelers and theoretical philosophers.

"We shall have a moist night of it, sir," said the driver of the coach from Boston to New York, to a young man who shared the coach-box with him; "will you be kind enough to hold the reins while I slip on my coat?"

"A stormy night, too," he added, when that operation was performed. "There was a flash! We shall soon be in the thick of it."

"With all my heart," said Arthur Willis. "I don't mind a little damp, but can't you give the poor woman a place inside? There are no inside passengers, I think."

The words were kindly spoken, and the woman looked thanks to the young man, who, for his part, seemed rather to enjoy the pelting rain, which, succeeding a hot July day, was laying the dust of the broad turnpike and stirring up a refreshing scent from the meadows and hedges which lined it.

"Beautiful! Grand!" exclaimed the young man suddenly, before the driver had time to reply to his question, as a vivid flash of forked lightning, followed by a loud peal of thunder, caused the high-bred horses to plunge in their traces, and proved the driver's anticipations to be correct and in course of speedy fulfilment.

The same flash and peal which startled the horses and excited the admiration of the young traveler, drew from the poor woman, just behind him, a faint cry of alarm.

On turning his head, Arthur Willis saw that she was pale and trembling, and that

the infant she carried was convulsively clasped to her bosom. He saw, too, that the slight summer cloak she wore, and the additional shawl which she had drawn over her bonnet and spread around her baby, were an insufficient protection from the fast-falling rain.

"Surely you will let her get inside," he said compassionately. "Poor thing! She and her child will be wet through in another five minutes."

"We will change horses directly," replied the driver, "and then I will see what I can do. The owner of this here stage is very particular. If he were to know of my doing such a thing, I should get a dressing. But on such a night as this is like to be—"

The coach drew up at a road-house. While the four panting, steaming horses were exchanged for a team fresh from the stable, the young woman and her infant were transferred from the outside to the inside of the coach.

The storm increased in its fury as the evening drew on. The lightning was fearfully brilliant, and almost incessant, the thunder was terrific, and the rain poured down in torrents.

The three or four passengers who were riding outside, wrapping themselves up in comfortable water-proof coats and cloaks, and pulling their hats over their eyes, silently wondered when it would be over, only now and then expressing a fear, which seemed not without foundation, that the horses could not stand it much longer, and that the off leader, especially, would soon bolt.

The thunder-storm had partially abated, but the rain still poured down heavily as the driver threw "the ribbons" to the hos-

fler, and a waiter from the road-house ventured out on the muddy road to announce that the coach would remain there half an hour, and that supper was on the table.

Glad to change his position, and not unmindful of the demands of a youthful and sharp appetite, Arthur Willis jumped down, and was entering the supper-room when a loud altercation at the door arrested his attention.

"Is she an inside passenger, I ask? That's all I want to know!" The voice was domineering and fierce.

"No, sir, she is not!" said the driver, "but she has a child, and is going all the way to New York, and isn't over and above well-clothed for the night traveling. There wasn't any one inside, and the storm came on, so I thought there wasn't any harm—"

The driver was interrupted in his apology and explanation by the coarse declaration that if he didn't mind what he was about he could hunt another job. The boss also insinuated that there was some understanding between the driver and the woman about an extra fee.

"There isn't anything of the sort," replied the driver bluntly, "and here's a gentleman," pointing to Arthur Willis, who had come forward a few steps, "who can tell you so. He knows when and why I put the woman inside."

Arthur Willis briefly explained that, at his earnest solicitation, the poor woman was accommodated with an inside place when the storm came on.

"She would have been drenched to the skin by this time," he added, "if she had retained her former seat on the top of the coach."

"That doesn't signify," retorted the boss. He was Peter Stuggins, owner of the road-house and one of the coach proprietors. On his overbearing and defiant address the outward costume of a gentleman sat misfittingly, while his temper was probably roughened by the light load of the coach that night.

"If the woman goes inside, she must pay inside fare; that's all!" and, returning to the coach-door, he placed the alternative before the traveler.

Without any further reply than that she was unable to accede to the demand, the young mother was about to step out into the soaking rain, when Arthur Willis gently interfered.

"You surely do not mean to turn the

poor woman and her baby out into the rain!" he said. "It may cause her death to be exposed through the whole night. I dare say she is not much used to traveling! She has nothing to wrap round her but a thin shawl."

"I can't help that," said Peter Stuggins sharply, as if the interference of the young traveler were a piece of gratuitous impertinence. "The young woman should have taken care of that herself."

"I did not think of its being such a night when the coach started," the woman said, in a soft, gentle voice. "If I had known it I would have stayed in Boston for the night. I had nothing warmer to put on, but I dare say I shall do very well," she added resignedly, "at least, if it wasn't for the poor baby."

Wrapping the object of her solicitude as warmly as she could in her shawl, she was about to step from the coach, when young Willis again interfered.

"It is a great shame," he said indignantly; "and I shouldn't have expected—"

"I should like to know what business you have to interfere," said Stuggins hotly; "you had better pay the inside fare for her yourself, if you think so much about it."

"Very well, I will," said Willis. "Please keep your seat, my good woman, and I'll make it all right."

"I couldn't think of it, sir," she replied, but before she could frame a remonstrance Stuggins and her young champion had both disappeared. While she was hesitating what to do next, the coachman came forward and informed her that she was to keep her inside place the rest of the way.

This settled the matter.

"Come, Mr. Willis," shouted a voice from the restaurant of the road-house, "you are going to help us, aren't you? There's room in the coach, but you must make haste about it! No time like the present! It will soon be 'Time's up, gentlemen!'"

"Thank you," replied Arthur, "but I am not going to take supper this evening."

The extra fare had dipped deeply into a purse not very well lined. If the poor woman had known the penance to which her young champion doomed himself as the price of his generosity, and how, in the drenching rain, which lasted all the remainder of the journey, he was fain to content himself with munching and mumbling a dry biscuit, just to amuse his internal economy with the hope of something better to

follow, she would not have passed the night so comfortably as she did.

In due time, however, the coach drove up to the office of the Ardsley Inn, where, in the early morning, a pleasant-looking, manly young mechanic was waiting its arrival. A gleam of satisfaction passed over his countenance as he scrutinized the roof of the stage.

"I'm glad she didn't come through on such a night as this has been," he said to a fellow workman by his side. "She is delicate and timid, and wasn't well provided with clothes; and the poor baby—"

"Here, Alex!" the voice of his wife from the open coach-window stopped short the young man's colloquy. He hastened to greet her.

"Bless you, Edith! I thought you wouldn't have come in such weather, and I didn't think to look for you inside, anyhow."

"Oh, I wanted to get home so badly," said the young wife, putting her baby into its father's arms, whereupon it began to kick and crow. "Besides," she added, "it didn't seem like rain when we left Boston, or, perhaps, I mightn't have come."

"Well, I am glad you were able to get an inside place."

"That would have been impossible," said Edith, "if it hadn't been for a young gentleman"—and she looked around to thank her friend afresh, just in time to see him turn the corner of a street.

"There! I am vexed," she said. On her way home she gave her husband a full account of her journey.

A few weeks afterward, one Sunday morning, as Arthur Willis and his sister were walking toward church, he passed a respectable young couple, in one of whom he recognized the woman of the stage incident. It was plain that he, too, was remembered, for, in another minute, the man had turned and was at his elbow.

"Excuse my freedom," he said, "but I wish to thank you for your kindness to Edith—my wife, I mean—that terrible night she came down from Boston."

"Don't speak about it," replied Willis. "I am glad I was able to give a little assistance; but it isn't worth mentioning. I hope your wife didn't suffer any. It was a bad night."

"Not the least in the world, sir, but she would have fared badly if she had come all the way outside of the coach. She had

been to Boston to see her sick mother, and hadn't more than enough to pay her fare home. I think you are money out of pocket, sir," the man added, after a little hesitation, "and if you wouldn't be offended at my offering to pay back—"

"Not a word about it, my good fellow; I couldn't think of it—"

"Then, sir, I must thank you, and hope to be able to return the kindness some other way." The man rejoined his young wife.

"What new friend have you picked up now, Arthur?" asked his sister when the short conference was ended; "and what is that about the coach? I understand now why you had to borrow of me the day after your journey."

"Well, never mind now, Jessy; I'll tell you all about it some day," said Arthur.

Years passed and Arthur Willis, now a man in his own right, was again a traveler from Boston to New York, but by a different mode of conveyance.

It was a dark afternoon in winter when he boarded the "fast express." Wrapping a railway blanket around him and exchanging his hat for a fur cap which he took from his pocket, he leaned back in a comfortable corner, and, half closing his eyes, waited patiently for the signal to start.

Arthur was in a dreamy mood, and took little note of surrounding objects. He had that same day landed in Boston, after a long and stormy voyage, and an absence from home of two or three years.

Images of home rose up before him, one after another, as he drew near and nearer, and mingled rather distractingly with the reminiscences of his travels in another hemisphere, and his calculations of profit and loss which might accrue from it, for his had been a commercial enterprise.

But there were other thoughts and images which jostled all the rest into a corner and then combined with them to tantalize his body with the vain hope of refreshing sleep.

A partnership in his father's business was in immediate prospect, and a home of his own, and a wife. Such a wife, too, as his would be! So long as he had waited and so hard as he had striven to overcome one obstacle after another which had arisen to postpone the union, if not absolutely to forbid it, but which had been finally overcome. No wonder that Arthur Willis could not sleep.

So dreamy, indeed, was he that he had

scarcely noticed, before the train started, two other travelers, who were sharing the car with him. They took a seat directly behind. In fact, Willis and the two strangers were the only passengers in the car.

When he did perceive that he was not alone, the dim light from the oil-lamp in the car roof told him little more than that one of the other passengers was a middle-aged man of respectable appearance, and the other a stout something in a bearskin coat, with a breath not free from a strong suspicion of ardent spirits, which made close contact anything but pleasant, and, moreover, with a rough, grating voice.

Willis's ears were not altogether closed against earthly sounds and he caught up insensibly some scraps of intelligence relating to events which, though commonplace enough at that particular time, had a tone of novelty.

He heard, for instance, of princely fortunes which had been run up in an inconceivably short space of time in the stock market; of the mad excitement which had attended the blowing up of a certain big bubble; of the tricks of knowing ones in buying and selling out, in starting illusory schemes and making profitable merchandise of human folly; of the bursting of the bubble, and the ruin of hundreds, who, in making haste to be rich, had lost the substance for the shadow.

"I don't like it—I never did like this sort of wholesale gambling," said one of the passengers. "They are scarcely to be pitied who have got their fingers well bitten by putting them into the trap. Their families, to be sure, will have to suffer—that's the worst of it."

"Ah, well, Mr. Smith," retorted the man with the loud voice and bearskin coat, "I can't say but what there has been a good deal of knavery at the bottom of it all, but if people will be cheated, let 'em, I say. But I shouldn't have thought of hearing you run down railroads, however."

"I don't run down railroads," said the other in a quiet tone, "and I can only say that I am thankful I have had so much to do with their practical working, as you know, as to leave me neither time nor inclination to play pitch-and-toss with them."

The train stopped at a lunch station and Mr. Smith left his place for a cup of coffee.

"I say," said the wearer of the bearskin-coat, in a confidential tone, suddenly leaning forward and nudging Arthur's back to

attract his attention. "I say, do you know that gent?"

"No, sir," replied Arthur Willis sleepily.

"Ah!" resumed the inmate of the bearskin, drawing a long breath, "a lucky fellow that. Why, you must have heard of Smith—Alexander Smith—the great railway man?"

"No, I haven't," said Arthur, "I have been abroad a good while."

"Oh, that accounts for it. You will hear about him, then. Well, that's Smith. Ten or a dozen years ago he was nothing but a Vermont mechanic; but some lucky hit he made about railroads gave him a lift. Now, they say, he's worth no end of money. You should just go and look at his factory—that's all."

"Oh!" said Arthur Willis; and at the same moment Mr. Alexander Smith reentered the car.

"After all, Mr. Smith," said the bearskinned traveler, resuming the conversation, "there is some excitement, though, in this gambling, as you call it. There was some fun in it while it lasted, at any rate. If some lost, others won, and so 'tis about square."

"How many losers to one winner?" replied Mr. Smith, rather sharply; "no, sir, it isn't square, nor anything like it; and so it will turn out in the long run. Look at the bankrupts reported in the newspapers!"

"Ah," responded the other, "things are out of square there, at all events. By the way, another of your nbbs is gone, I see. What's-his-name, of Worthing Street, I mean."

"Yes, sir, I am sorry for it. Two hundred and fifty thousand dollars, they say, and not twenty-five cents in the dollar nor anything like it. All gone in this mad, wild-goose chase after railway stocks. And yet, it was done so secretly, and the party had such a reputation for wealth and shrewdness, too, that a week ago it was looked upon as one of the firmest houses in New York."

There was something in the tone the conversation had taken which arrested the young traveler's attention.

The street mentioned was that in which his father's business was located, and he felt some curiosity to know which of his neighbors was spoken of as Mr. What's-his-name. Meanwhile the conversation went on.

"Perhaps you were let in there, Mr. Smith?"

"No, sir, not a penny," was the answer.

"I fancied you might," said bearskin; "you said you were sorry."

"Well, sir, I suppose it is possible to be sorry for others as well as for one's self. I am sorry, too, for these shocks that are given to commercial confidence. It seems to be, nowadays, that everybody is suspected, and as much mischief will be done that way as has already been done in another. Besides, I am sorry for Mr. Willis and his family, for—"

"Excuse me, sir," interrupted Arthur, turning to face them, "but did you say that Mr. Willis—"

Arthur stopped short. He could not frame the question that trembled on his lips. "It is of Mr. Willis I was speaking, sir," replied Mr. Smith mildly.

"But not of—that is, you do not mean that there is a—that there is anything wrong in Mr. Willis's affairs?"

"It is too well known by this time to be doubted. You have heard that his name was in yesterday's newspapers, and his place closed. The common report is that Mr. Willis has ruined himself by railway transactions, and that he is heavily involved."

"But not Mr. Everard Willis?" said Arthur, with increasing agitation, which all his efforts could not subdue. "Some other person of the same name, perhaps—not Mr. Everard Willis, of Worthing Street? There must be some mistake."

The reply he received precluded all possibility of mistake.

Thankful now for the dull light of the railway lamp, the young man, stunned and bewildered by the sudden and unexpected intelligence of his father's ruin, sank back again into his seat.

His day-dreams dispersed, and in their stead came a confused and tangled web of gloomy forebodings.

Shortly afterward, the rough-coated man left the train, and Arthur became aware that he was undergoing the scrutinizing gaze of his only remaining companion. Before he could screen himself from this disagreeable examination, the silence was broken.

"I am not wrong, I think," said the gentleman called Mr. Smith, "in believing that I address Mr. Arthur Willis?"

"I am Arthur Willis, certainly," replied the young man; "but you have the advan-

tage of me, sir. I have never before had the pleasure of meeting Mr. Smith, I believe."

"Once before, under different circumstances, but that is of no consequence now. I have to apologize, very sincerely I assure you, for the pain I have unintentionally given. I was not at all aware who was my traveling companion when I spoke of—"

"It is of no consequence, sir," said Arthur, "if what you say is true, I must have known it to-night, and a few hours sooner or later makes no difference."

Again he relapsed into a silence, from which his fellow-traveler did not attempt to rouse him until the shrill scream of the engine gave note that the end of the journey was reached. Then Mr. Smith again spoke.

"One word with you, Mr. Willis," he said. "I am afraid you will find matters in a bad state. It seems strange to me that you knew nothing of this before but, at all events, I have been thinking I may be of some little assistance to you. If so, here is my card. Come and see me."

Arthur mechanically took the offered card, and muttered an acknowledgment of thanks for the proffered kindness. In a few minutes, a cab was conveying him and his luggage from the railway station to his father's house.

"Tell me, Jessy," were almost the first words he uttered, as his sister, in tears of mingled sorrow and gladness, welcomed his arrival, "is what I heard this night true?"

"Arthur, you have heard nothing too sorrowful to be true. We are ruined."

"Father—what of him, Jessy?"

She shook her head mournfully.

The mad excitement of a few months, and its results, had brought about an imbecility of both mind and body, painful to witness.

"You are our only hope now, Arthur. Oh! how glad I am that you are at home!"

Arthur Willis slept little that night. In the news which his sister had confirmed he foresaw the downfall of all the hopes which had so recently shed such a bright halo about his future. The partnership would be a partnership in poverty and disgrace; the matrimonial engagement must end in bitter disappointment.

"I am sorry for you, Arthur," said the father of the young lady the next day, when Arthur called on him at his counting-house. "I must say you have behaved honorably in coming to me first, but your own good sense will tell you that the connection should be

dropped altogether. You know that I did not give my consent to it very willingly at first; and *now*—"

There needed nothing more than that emphatic *now*. Arthur returned home with a broken heart.

His arrival, however, was very opportune. He had a good standing among his father's creditors, and it was known that he had had no share in the errors which had brought about the failure.

His assistance was valuable in winding up the heavy affairs of the bankruptcy. With straightforward and honorable frankness, he made his services available to the utmost.

One evening, while the settlement was yet uncompleted, and after the harassing duties of the day were over, he was slowly returning from the office to his father's residence. He was accosted by a gentleman whom he dimly recognized as the companion of his railway journey.

"I have been expecting and hoping you would take me at my word, Mr. Willis, and would have called on me before now. But as you have not, I was just going to find you. Are you disengaged? If you are, and will allow me, I will walk homewards with you."

Arthur nodded his pleasure.

"And now, what are you doing? How are you getting on? But I need scarcely ask you this, for everybody I meet speaks in praise of your disinterested effort to make the best of this disastrous affair. Really, to tell the truth, I am not sorry you have not been to see me before now."

"What is the meaning of this?" thought Arthur. He did not speak, and presently his home was reached.

"Now, Mr. Willis," said Mr. Smith, when they were alone, "may I ask what you intend doing when these affairs are finally settled?"

Arthur replied that he had formed no plans for the future. He supposed, however, that a mercantile situation might be obtained.

"Your father's business was a good one, I believe, Mr. Willis. Why not take it into your own hands?"

The interview was prolonged to a late hour and the young man entered the room in which his sister was waiting for him, in a more hopeful frame of mind than he had enjoyed since his return home.

A few weeks passed away, and then it

became known that Arthur Willis had re-established the business which his father had been compelled to relinquish, with all the advantages of an enlarged and profitable foreign trade.

He made no mystery of the fact that the unsolicited assistance of Mr. Smith had enabled him to take this step; and when this was explained, all wonder ceased; for the large-hearted, open-handed, but sometimes eccentric liberality of that gentleman was no secret.

Nevertheless, there was a mystery which for months afterward remained uncleared.

"You never saw Mrs. Smith before, do you say, Mr. Willis?" It was in Mr. Smith's drawing-room that this fragment of a conversation passed.

"Never before she did us the honor to call the other day. Never, at least, that I can remember."

"Look again, Mr. Willis; are you quite sure? And this girl"—laying his hand on his eldest daughter, "have you never seen her before?"

Arthur was puzzled by the tone of the speaker. He repeated the assurance that if he had ever had that pleasure his memory played him falsely.

"Perhaps you will refresh our friend's memory, Edith," said Mr. Smith to his wife.

"Do you not remember," asked the lady, in a soft, gentle voice, "a dreadful storm, on a July night, many years ago, traveling from Boston on the coach, a poor young woman, lightly clad, with an infant in her arms?"

"Yes, yes, I certainly remember that—all that," said Arthur eagerly, for the truth at once flashed on his mind.

"And the poor woman's foolish alarm? and the harshness of the coach proprietor, who would have turned her out of the coach, and how it was that he did not do it?"

"And that young woman's husband, Mr. Willis," continued Mr. Smith, "who told you that he would find means of repaying the kindness which was shown without expectation of reward or thanks? Have you never happened to meet with him since in your travels? Tell him, Edith, what you know about it?"

"I am that poor woman," she said.

The seed of a little kindness, sown years before, had sprung up and borne this goodly fruit. The bread cast upon the waters had returned after many days.

Ten Thousand Miles by Rail.

BY GILSON WILLETS,
Special Traveling Correspondent of "The Railroad Man's Magazine."

No. 7.—THE BOYS OF THE MISSISSIPPI VALLEY.

Chasing Desperadoes in Missouri—Hero of a Moving-Picture Drama—Why
a Pistol Was Borrowed—Foley's Length of Service—
Running a Road on Credit.



IN a Chicago and Alton train, in a forward day-coach which was used as a smoker, sat nine passengers, also one trainman, namely, Alec Lewis.

The train had come from Chicago and, toward evening, was nearing St. Louis. It was a cold, blustering January day.

The rear seat in the smoker was occupied by a smooth-faced, meek-looking man who for hours had insisted upon keeping his window open, though the day was unusually cold.

Trainman Lewis sat down beside this meek-looking individual in the rear seat, and said:

"Seems like you'd catch cold with that window open."

"I've got to risk that," replied Uriah Heap.

"And that there package of yours," persisted Lewis. "It must be valuable. I notice you never leave it out of your hands. You carried it with you even when you went up forward to get a drink of water."

"You bet it's valuable!" exclaimed the humble one.

"You a bank messenger?" asked the inquisitive Lewis.

"No, a butler. I've been ten years with one family, in Boston. My master is a very rich gentleman."

"Ah, I see," said Lewis. "You are car-

rying a valuable present for him to some one in St. Louis."

"Yes, a present," assented the butler. "A present of fifty thousand dollars in cash."

"Good Heavens! You mean to say there is fifty thousand dollars in cash in that package?"

"I do."

"Your boss must be crazy. Why didn't he give you a check?"

"He couldn't. The present had to be in cash."

"Aren't you afraid of being robbed?"

"Maybe. But I'm going to throw this money out of the car-window some time before we reach St. Louis."

"What's that? Throw fifty thousand dollars out of the window?"

"Yes, I expect to toss it out any moment now. The wonder is that I've not been ordered to throw it out before this."

"And is that why you've kept that window open this cold day all the way down from Chicago?"

"Yes. I'm talking too much, I know. But—you're not a detective, are you? No, of course not. You're a brakeman."

Lewis had jumped up. He now stared at the humble-looking man with an expression of pity.

"Look here!" he said, "if you're a butler to a rich man, you're a crazy butler to a crazy millionaire. I say you're

Series began in June Railroad Man's Magazine. Single copies, 10 cents.

both lunatics. Fact is, however, I believe you're stringin' me. Fifty thousand dollars! Fifty thousand nothin'! You belong in a loony house, you do."

But the meek-looking man merely smiled indulgently, as one would beam upon a child who knoweth not whereof he prattles.

Trainman Lewis left the man at the open window and walked to the forward end of the car. The train was within sight of East St. Louis. Just then one of the passengers in the middle of the car arose and walked down the aisle till he came to the man by the open window. He leaned over and said in a low tone:

"When the whistle blows at the approach to the Eads Bridge across the Mississippi—let her go."

Just then two other men suddenly appeared. They threw themselves on the passenger who had given the order to the butler, and one of them cried:

"No use resisting, Tom Brandt. We know all about your game—and you're done for."

The speaker held both hands of the man called Tom Brandt as in a vise, till the second man applied the handcuffs.

At the same time, the whistle blew for the railroad bridge across the Mississippi. The butler fumbled with his package and began lifting it toward the car-window, when one of the captors of Tom Brandt cried:

"No! No! Keep that! Hold on to it! Don't throw it out! You must obey us now! I'm Detective Collins, and this is Detective Burt."

Just then came the report of a pistol. Detective Collins fell senseless on the floor with a wound in his head.

A second report rang out. Detective Burt staggered, then clutched spasmodically at his arm, through which a bullet had passed.

The two shots were fired, not by Brandt, who was handcuffed, but by another man in the car—one who turned out to be "Easy" Walker, a pal of Brandt's.

Not once had he spoken to Brandt on the ride down from Chicago, nor had the two given any sign that they were acquainted, so the detectives were not aware that they would have to deal with two men.

"Easy" Walker, the man who had fired the shots, shouted to Brandt: "Come on! Use your legs! We must jump!"

All this happened within sixty seconds.

The drama was witnessed by Trainman Alec Lewis and the passengers in the smoker. Lewis, seeing the handcuffed man and the one who had fired the shots both making for the rear door with the evident intention of jumping from the train, pulled the bell-cord desperately.

Before the train had come to a standstill, however, the two desperadoes jumped, landed safely on their feet, and began making a dash across a field.

"Chase 'em!" cried Burt, the detective who had been wounded in the arm, addressing all in the smoker. "Get after those men, you fellows. Quick! Don't let 'em get away!"

Trainman Lewis rushed from the car, leaped to the ground, and passed the word to the crowd of passengers who had piled out of the train to learn the cause of the sudden application of the air-brakes.

At least fifty of the passengers started in pursuit of the two fugitives. They formed a posse led by Trainman Alec Lewis.

Lewis ran after the fleeing men, the posse keeping close at his heels. They gradually fell behind, however, till quite a distance intervened between Lewis and the passengers.

As Lewis neared the fugitives, the one who was handcuffed, Tom Brandt, managed to pull a revolver and fire it. His shot went wild. Lewis did not even slacken his speed. Just then, alas! the one who was not manacled, "Easy" Walker, also pulled a gun and let fly at Lewis.

The trainman went down with an ugly wound in his leg.

The pursuing passengers rushed up to the fallen trainman and all came to a dead stop. Some bent over him and fastened handkerchiefs around his leg to stop the bleeding.

Then, like a true hero of the battlefield, Lewis said:

"Never mind me, you confounded ignoramuses! Go on after those men! If any of you have guns, let that man who shot me have all the lead he can stand!"

Electrified again into action by the trainman's command, the excited passengers started once more in pursuit of the fugitives, only to hear the leaders shout:

"They're caught! Look! Those men building the fence! One of 'em threw a fence-rail at the handcuffed man, catching him square on the legs. There! The other fence-builders are piled up on top of the other runaway!"

It was thus that the two fugitives, Tom Brandt and "Easy" Walker, were at last checked in their flight, disarmed, and held captives by a dozen Illinois farm-hands who had been building a fence.

The two prisoners were hustled back to the train by the posse, while Alec Lewis was made as comfortable as possible on the floor of the baggage-car.

One of the two wounded detectives produced another pair of handcuffs, and "Easy" Walker was manacled. The prisoners were then chained together, thrown into a seat, and guarded by a number of determined men while the train rolled into East St. Louis. The three wounded men—Trainman Lewis, hero of the day, and the two detectives—were taken to the hospital, while the prisoners were led off by the police.

Meantime, the meek man who had told Lewis about the fifty thousand dollars, anxiously inquired of the train-conductor what time he could get a train from East St. Louis that would carry him back to Boston.

When the three wounded men were put to bed side by side in the hospital, Trainman Lewis said:

"Will you two detectives kindly inform me what this is all about? What am I all shot up like this for, anyway? And why are you two lying on those cots, down and out?"

The story the detectives told Lewis was this:

The two desperadoes, Tom Brandt and "Easy" Walker, were members of a gang who had kidnaped Eddie Brathwaite, son of a millionaire of Boston. The meek-looking man who persisted in keeping the car-window open on that cold January day, all the way from Chicago to St. Louis, was indeed Mr. Brathwaite's butler, and his package really did contain a full fifty thousand dollars in yellow-backs.

For two months the crooks had been in secret communication with Mr. Brathwaite regarding the ransom. But each time when an hour and place

had been fixed for handing over the ransom, the police intervened to prevent the payment of the money.

At length the crooks wrote Mr. Brathwaite that if he wished to see his son again and alive, he must send a messenger to St. Louis, on a certain train, with fifty thousand dollars in cash. The letter also stated that a certain man would be on the train with the messenger, and would tell him exactly when and where to toss the money out of the car-window. The crooks added that one of their gang would be at the spot indicated, ready to pick up the package when it was flung from the train.

With these demands Mr. Brathwaite complied, saying nothing, however, to the authorities; for he preferred to part with fifty thousand dollars rather than take any further chance of hearing that his son had been murdered as a result of his refusal to pay the ransom. Nevertheless, the police discovered what was afoot.

"But the kid!" exclaimed the trainman, when the detectives had finished their tale. "Have they got the kid?"

"Yes," one of the sleuths answered. "Eddie Brathwaite was found this morning with



"WHEN THE WHISTLE BLOWS AT THE APPROACH TO THE BRIDGE, LET HER GO."

Jim King, the leader of the gang, in a house in Chicago."

A week later, the happy father of Eddie Brathwaite divided a generous part of the fifty thousand dollars as a reward among the various detectives and others who had found his son and captured the kidnapers.

Trainman Lewis, before leaving the hospital in East St. Louis, received a letter from Mr. Brathwaite. After reading it, he showed it to the two wounded detectives. After they had read it, Lewis said to them:

"Did I ever remark to you fellers that I pronounced that butler and his boss both crazy? If I did, I deny now, emphatically, that either of 'em is insane. They're both as sane as I am, and I'm near-crazy with thinkin' of the good deeds I can perform when I get hold of what that letter says I will get."

The Yazoo Car-Tagger.

On the way up from New Orleans I traversed the east bank of the Father of Waters to Memphis, by the Yazoo and Mississippi Valley Railroad, thence up the west bank to St. Louis by the "Mop." Among the stories related by the "Valley Railroaders," were the following:

The car-tagger-in-chief of the Yazoo and Mississippi Valley Railroad, at Vicksburg, was George Burdette, one of the most matter-of-fact of the railroad sons of the Father of Waters. Burdette, always conscientious and loyal to his road, nevertheless was unfalteringly a Doubting Thomas when it came to "taking stock" in stories or plays or moving-pictures of railroad life.

"I take no stock in such things, because nothing ever happens to a railroad employee except an accident or a wreck.

"No, sir; nothing outside the regular performance of his duties ever gets coupled onto him.

"Last Sunday night," he went on, "I went to a moving-picture show. Along came a film called a railroad melodrama, in which the villain tied a section-foreman to the tracks, and left him there to be slaughtered by the limited, all just because the foreman wouldn't let his beautiful daughter marry the villain. But the heroine, the foreman's offspring, came on a dead run and untied her father in the nick of time.

"Now, I allow that no such dinged nonsense ever happens to a real railroad-man. I read stories of us in the magazines, and I

don't guess such thrillers ever happen in real railroad life, neither. Them's just stories."

"Oh, I'm not so sure," remonstrated Burdette's friend. "You can't tell what minute somethin's goin' to happen to one of us, to get a feller a loomin' up as a hero in a railroad story. You're likely to get into a thriller yourself, any old time, Burdette. You ain't immune."

"What?" retorted Burdette. "*Me?* A car-tagger in a thriller? Not on your life! Nothing thrilling ever happened to a car-tagger in the history of the world."

A few nights later, George Burdette was working overtime at his car-tagging. It was nearing ten o'clock, and nearly all the other men of the Vicksburg station and yards were at the moving-picture shows. In the yards, not a wheel was stirring, not a sound heard except the crunch of Burdette's feet on the cinder-path between the box cars.

Suddenly four strong arms seized Burdette and a voice, low but husky, said:

"Don't cry out, or you're a dead one!"

Burdette, looking into the business end of a six-shooter, which gleamed in the moonlight, answered:

"I'm no such fool as to yell! This is a hold-up, is it? Well, search me. Go far as you like. If you find any dough on me, keep it."

"You're off the track," said the man with the gun, while his pal held the car-tagger's arms pinioned behind him. "We know you, Burdette, and we know you ain't got no money. You never did have and never will have as long as there's a moving-picture show in town. What we want is for you to give us the combination of the safe in the depot."

"There's where *you're* off the track," answered Burdette. "I don't know the combination. If I did—I'd have to be dead drunk to give it to you."

The two highwaymen, with terrible oaths, then insisted that Burdette did know the combination. They swore that Burdette had learned the new combination that very day.

"Know what we'll do to you if you refuse to cough up the figures?" one of the highwaymen added. "We'll lash you to the track."

"I do *not* know the combination," persisted Burdette.

"Then you're as good as dead right now, just for not knowing," was the verdict.

The desperadoes meant business, too. They forced Burdette up the track, at the

point of the six-shooter, and stopped at a spot just beyond a curve.

"Tie him here," said one of the men.

"What with?" asked the other.

The first man ran his hand over Burdette's person. "Here's his belt," he said. "Tie one of his arms to the track with that. And here's his necktie. Use that to tie his other arm."

The car-tagger struggled manfully, but the men with the guns lashed him to the track just the same.

"Now," said the leader of the highway-men, "the express from New Orleans is due along at ten-thirty-five—just twenty minutes from now. Any time within nineteen minutes will be plenty for you to remember that combination, Burdette. When you do, just you yell out the figures, and we will come and set you free."

The men disappeared. Burdette lay there helpless, knowing that unless he complied with the conditions named, the north-bound express would surely end his life.

Ten minutes passed—and fifteen. In five minutes more the express would come thundering along, and he would be ground to pieces. He heard the screech of a locomotive whistle.

In the desperate instinct of self-preservation, the car-tagger gave a terrifying yell. Did he yell the figures of the combination? No. He yelled just this one word:

"Help!"

He could feel the vibration of the rails under him, the peculiar and terrorizing sound advertising the swift approach of the express. Burdette calculated that the train was not more than a mile away.

"Whatever am de matter wif you, boss?"

Burdette looked up, saw an aged negro standing over him. That black man looked to the car-tagger like an angel from Heaven.

"Here! Here!" he cried. "Untie me, quick! Got a knife? You'll find one in my trousers-pocket. There! Now cut me loose! The train's almost to the curve now!"

One stroke of the knife severed the belt. A second stroke freed the car-tagger from the necktie that bound him. He scrambled to his feet and jumped to one side—just as the express crashed by.

"You've saved my life," said Burdette to the negro. "What can I do for you?"

"Do you-all happen to have a match, boss? Ah've got baccy and a pipe, but ain't got no match. What? A whole boxful? Thank you, boss."

The life-saver trudged on down the right-of-way, smoking like a chimney, while George Burdette, car-tagger of the Yazoo and Mississippi Valley, trudged up the right-of-way, muttering:

"Well, I'm blowed! Don't it beat *all*? That it should happen to me! It's the limit."

Burdette went back on his job and said not a word to a living soul about his thrilling experience.

Two days later, however, he met the railroad friend to whom he had declared that nothing ever happened to a car-tagger.

"Hear you're now taking stock in railroad melodrama such as you see on the stage and in moving-pictures, Burdette," said the friend.

"What's ailin' you?" asked the car-tagger, refusing to look his friend squarely in the eye.

"Hear you're takin' stock, too, in those yarns printed in the magazines," the friend continued. "That was a close shave you had the other night. It would make a real good moving-picture."

"Rot!" answered Burdette.

"That negro told us how he needed a light for his pipe and got it," continued Burdette's friend. "Say, George, are you-all convinced that things sometimes do happen to railroad men in real life like they do in stories?"

"Well," drawled the car-tagger, hesitatingly, "maybe just once in the life of a man something may happen to him. But not twict. No sir, not twict. I'm glad that thing happened howsomever."

"Why?"

"Because—don't you see? As such a thing never happens twict, I'm now one of those chaps the doctors call an *immune*."

The Borrowed Pistol.

Just after I pulled into Baton Rouge on the Yazoo and Mississippi Valley Railroad, one of the boys of that line said:

"Hunt up 'Pinky' Ross while you're in this here Louisiana capital and get him to tell you the story of Dan Childress, the train newsboy."

"Ross of the Yazoo?"

"No. Of the Louisiana Railway and Navigation Company. That line runs through here, you know. This is their principal station between New Orleans and Shreveport."

"Pinky" Ross, a yardman whom I found at the hostler's shanty, plunged straightway into his story.

"It's some powerful amazin', suh, how train newsies will sometimes hike sudden into a railroad drama. Ah reckon that you

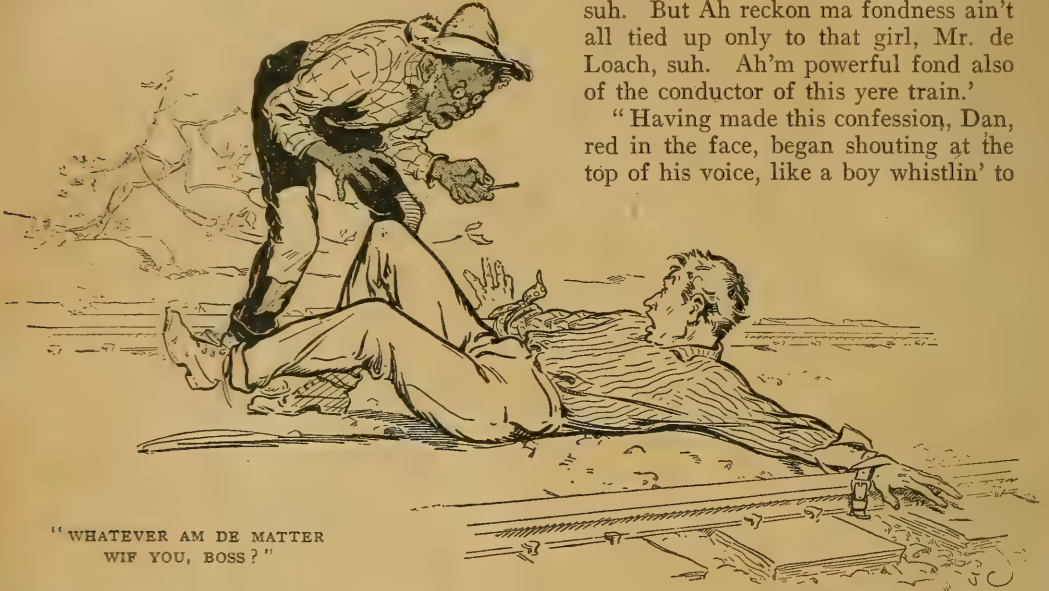
kin' with that girl o' your'n up to Shreveport?"

"Backwards, Mr. de Loach, all backwards progress, suh."

"You reckon you're most powerful fond o' that girl, Dan?"

"Some fond, Mr. de Loach, yes, suh. But Ah reckon ma fondness ain't all tied up only to that girl, Mr. de Loach, suh. Ah'm powerful fond also of the conductor of this yere train."

"Having made this confession, Dan, red in the face, began shouting at the top of his voice, like a boy whistlin' to



"WHATEVER AM DE MATTER
WIF YOU, BOSS?"

don't come too often by dramas wherein newsboys figure; but this time, suh, you're up against Dan Childress, a live one.

"About three years ago, Dan was sweet on a girl up at Shreveport, out of which town he had a run on No. 1 of the Louisiana Navigation Line. Somehow, the girl didn't seem to want to front up much with Dan.

"One morning Dan met the girl on his way to his train.

"Ah reckon," said he, "that Ah'd be powerful prideful if you'd meet me at the picture-show to-night, will yer?"

"Go 'long, Dan," the girl answered. "You-all is only a kid. Nope! Nixy picture-show. You-all better find a young-girl to tote 'round, 'cause Ah'm some class with the grown-ups."

"Crestfallen, Dan boarded his train for the run south and began yellin' in fierce and mad tones:

"All the latest magazines!"

"The train pushed on southward, till pretty soon Conductor de Loach meets Dan and pats him on the shoulder, fatherly-like, and says:

"Dan, ma boy, what progress you ma-

show he's none afraid of nothin' in the world:

"All the latest magazines!"

"Don't you see, suh, Dan Childress liked Conductor de Loach powerful much 'cause De Loach was always moughty kind to that youngster. Dan was mostly alone in the world, and he kinder looked up to De Loach like he would to a father.

"Well, suh, as Dan went down the aisle shouting out his wares, the drama begins.

"The train had pulled up at Hagen Station. Suddenly Dan hears a cry that sounds like it comes from a man who's been hurt. Dan recognizes the voice of Conductor de Loach and turns in time to see a man on the forward platform in the act of kicking De Loach off'n the train.

"He's stabbed the conductor!" shouted the passengers. "That man drove a knife into the conductor three times."

"Seeing De Loach kicked from the platform and hearing how he had been wounded, Dan Childress drops all his magazines and starts up the aisle shouting:

"Got a pistol? Who's got a pistol? Some one lend me a pistol!"

"Well, suh, a planter from Shreveport,

who knew Dan, outs with a gun and hands it over to the newsboy. Dan rushes out of the car, leaps to the ground and hot-foots after the butcher who had stabbed De Loach.

"Past the station and up the right-of-way, Dan runs, pretty soon gettin' close on the more or less rheumatic fugitive, and crying:

"'Stop runnin'; you butcher! Stop, or Ah'll down you with a bullet!' To emphasize his words, Dan fires a shot in the air.

"The butcher stopped. In another moment Dan had poked his pistol into the man's face, saying:

"'There's a calaboose in this town that's goin' to open its doors to you, quick! You come along with me!'

"And, suh, Dan actually marched that man, at the point of his borrowed six-shooter, right up the main street of Hagen all the way to the jail.

"That evening, when Dan's train arrived at Shreveport, the news of his exploit had preceded him. While the ambulance toted Conductor de Loach to the hospital, all the railroaders swore Dan was some hero. Even strange men hailed him and said, 'Put it there!' just like Dan was a good many years older'n seventeen.

"And what do you think! Up walks that girl. Dan was sweet on, and says to him:

"'Dan Childress, Ah reckon Ah'd be powerful prideful to be seen with you-all at the moving-picture show to-night. Ma mind is shore some changed about you-all bein' only a kid.'"

For Length of Service.

"I'm a Venetian by birth," remarked a Wabash Railroad trainman, at the St. Louis Union Station.

"You don't look a bit Italian," I responded.

"No, sir. All the same I was born in Venice."

"And you worked on a railroad out of Venice?"

"Yes, sir, for years. I was there only yesterday, on a visit."

"In Venice yesterday and St. Louis today!" I exclaimed. "You must travel by cable."

"No, sir. You see, sir, my Venice is right here in the Mississippi Valley. I'm speaking of Venice, Illinois."

"Well," I said, chuckling with him, "anything happen in Venice, Illinois, that ought to get into print?"

"No, sir. Nothing. Nothing ever happens to railroaders in Venice."

It was plain that my Venetian friend had a story to tell. But as a tale-bearer he lacked courage.

To encourage that Venetian railroader, I told him the first story that came into my head, and, by sheer accident, it proved to be just the right story to cause him to recollect that something really did happen once upon a time to a railroad man in Venice, Illinois.

"Your name is Washington Long and you're a trainman?" I began.

"Yes. My name's Wash."

"Well, Wash, I know I can't scare you off your job by any story, so I'm going to tell you how five trainmen, all pals, began and ended their railroad careers in a time so brief that the case is a record one.

"I heard this story at Roanoke, Virginia," I went on. "The five men in question all went to work on the same day for the Norfolk and Western Railroad, three as passenger trainmen, and two as freight brakemen.

"One morning, a few days later, four of them walked into the general offices at Roanoke and asked for and received permission to lay off that afternoon to attend a funeral.

"Three days later, *three* of them again appeared at the general offices and said they wanted an afternoon off to take part in a ceremony of last rites.

"A week passed, and *two* of them showed up in the general offices and announced that they wanted an afternoon off to pay final tribute to a certain deceased.

"Another week passed, and *one* of them walked into the general offices. This lone man was the youngest of the five trainmen. His name was Rob Pollard. In a weary voice, now, he said he'd like an afternoon off to attend certain obsequies."

"The very next day Rob Pollard again appeared at the general offices, looking so dejected that the train-master exclaimed:

"'What's the matter, Pollard? You look as if you'd lost your last friend.'

"'I have,' answered Pollard.

"'What! Another funeral? Great Scott, man! You've already attended no less than *four* funerals this month.'

"'No sir. I'm not looking for a lay-off

for a funeral this time. I'm here to resign.'

"Resign? Why?"

"Well, sir, you see, there's too many funerals in the railroad profession. A month ago I started to work here with four of my best friends. The whole four are now lying in the cemetery. One was killed in a wreck; a second by flying fragments of a locomotive when she blew up; a third fell to his death from the top of a moving freight; and the fourth, the one I buried yesterday, was run over and killed here in the yards. I'm the sole survivor. I've come to get my time, sir. I'm an electrician, and I'm going back to my trade.'

"But," expostulated the train-master. 'Just because all your friends were killed is no reason why it should be your turn next.'

"Oh, that ain't it, sir. I ain't afraid of being killed. That ain't it. What gets on my nerves is these here frequent funerals. I just can't stand the expense for flowers.'

"There!" I said to my Venetian friend, at the conclusion of my story. "Can you beat it for brevity of service?"

"Beat it?" exclaimed the trainman from Venice, Illinois, showing unutterable disgust. "Beat it? I should say I could. You say that case at Roanoke is a record one? Holy smoke! It's about a million miles away from the record. Fact is, sir, your story ain't got no right to be entered into the running at all. A whole month! Holy smoke! Why, that's just ages compared to the period of time involved in the case which I'm going to tell you about.

"It's the case of Michael Foley, fifty years old, who started a railroad man for the first time in his life at seven o'clock one morning last March.

"It all happened in the yards at Venice, Illinois. At five minutes before seven that morning, Foley, having been duly hired the day before by the Wabash railroad, reported for duty at the yardmaster's office.

"Now, Foley," said the yardmaster, 'you're a flagman, do you understand? Here's a red flag. You take it and go up to the Main Street crossing and, when you see a train coming, you wave that flag to warn vehicles and folks afoot that they're in danger. I tell you, Foley, you're now a member of the railway army. You're a private in the ranks, but the safety of the public depends upon you.

"You're a standard-bearer, do you understand? You're a color-bearer. Your duty is to stick to your duty, no matter

what happens. Never you budge from your station, never desert your post, never lower that flag, no matter who tries to divert you from your duty. And, above all, obey orders. Obey 'em strict and to the letter.'

"Yes, sir, I do, sir. I'm to stand pat with this here red flag through thick and thin, and no matter who or what comes along, I'm to show that I'm planted and have taken root and am growing up on this crossing, like a oak-tree.'

"At seven, exactly, Foley took his post at the crossing, with his red flag.

"Five minutes later two men loomed up at the door of the yardmaster's office and laid a heavy thing down on the door-step.

"What's that?" asked the yardmaster.

"A corpse," the men replied.

"Whose is it?"

"Don't you recognize the new flagman?"

"Recognize that? No. It looks like it might have been a man once, but I ain't sure. He's some smashed, ain't he?"

"Yes, sir, he was thrown some fifty feet by southbound No. 4.'

"Wait a minute," said the yardmaster. 'I'll give him his time.' He glanced at the clock. 'Five minutes, and no overtime,' he said. 'All right! How did the deceased meet his demise?'

"Well, sir, it looked to us-all mighty like a case of suicide. Yes, sir, we-all say it was a self-murder. Foley was standin' plumb on the track in front of that Burlington train, waving his flag, frantic-like, all round his head. A driver of a lumber-wagon and half a dozen pedestrians and a lot of yardmen yelled to him to get off the track. But Foley just wouldn't budge an inch. Even the engineer waved his hand from the cab as frantic as Foley waved his flag, but Foley stood pat—till he went flyin' through the air.'

"The yardmaster, as he heard this, tugged nervously at his mustache and kept muttering, 'Fool soldier! Idiot soldier!'

"Finally, when the yardmen had finished their tale, all the yardmaster said was:

"Take this dead soldier over to the undertaker and tell him to inform the relatives of Foley that there's a sum of money due them—the wages due the deceased at the time of his demise.'

"Well, sir, the sum of money due those 'heirs and assigns forever' was exactly one cent—Foley having worked overtime a few moments.

"And you never saw a man fuss about anything the way that yardmaster at Venice, Illinois, still fusses about that penny. Ever since Foley was buried he has been pesterin' Undertaker Childman, findin' all kinds of fault because the undertaker hasn't found a single heir or assign forever. It looks like the yardmaster will have to keep that cent, all right. And you can't deny it, that the world's record for

place, and over twenty of them informed the conductor that they were broke and without tickets.

"All right!" the conductor said. "You fellows keep tabs on yourselves till pay-day."

Finally, one evening toward the end of the month, when the thirty workmen boarded the train, not one of them possessed either a ticket or the coin for a cash fare.

"STOP RUNNIN'; YOU BUTCHER!
STOP, OR AH'LL DOWN YOU
WITH A BULLET!"



length of service by a railroad employee belongs to Michael Foley, color-bearer of the Wabash."

"Billy Bryan's Train."

When an Illinois Central train on the Carbondale-Johnston City stopped one evening at a town where a large manufacturing plant is located, thirty-odd workmen filed into the smoker. When the conductor came through, at least ten of the men announced that they possessed neither tickets nor money.

"All right!" said the conductor. "You fellows keep track of what you owe me."

A few nights later, the same thirty workmen boarded the same train at the same

"All right!" said the conductor. "Your credit is good till pay-day."

On the evening of the first day of the new month, on arrival at Carbondale, the conductor went in the auditor's office and turned in a sum of money somewhat in excess of seven hundred dollars.

"What's this?" asked the auditor, evincing great surprise.

"Cash fares," was the answer.

"Your cash fares for the day usually amount to about fifteen dollars. Why such a mighty lot of cash fares on this particular day?"

"It's pay-day down at that mill town, that's why. For the last ten days a lot of workmen down there didn't have any money. No, sir, not a cent did they have till to-day.



But I let them ride all the same, every evening."

"What! Running a railroad on credit?"

"Yes. I had to let them ride on credit in order to get that seven hundred dollars. If I had not let them ride on credit, those men would have walked, and we would have lost this bucketful of dough."

"All right. But next time let 'em walk."

All the same, on the first day of the following month, that same conductor turned in over eight hundred dollars, representing his cash-fare collections for a single day, though for thirty days before that he had not turned in more than seventeen dollars for the cash fares for any one day.

Month after month, he continued to turn in an excessive sum on the day the mill-hands at the manufacturing town were paid off. Despite every command and demand and threat and warning of the auditors and other officials, the conductor continued to "run the railroad on credit."

That conductor was Billy Bryan, and his train was known to all the inhabitants of the Mississippi Valley in Illinois as "Billy Bryan's" train.

I heard of Billy Bryan, from Eye-See men and from men of the Yazoo and Mississippi Valley, day after day as long as I remained in the Valley of the Father of Waters. One railroad man after another told me Billy Bryan was known personally to nearly every man, woman, and child in Illinois; that for over thirty years he had run the same train from Carbondale to Johnston City and return, being on the job

daily from five in the morning till eight in the evening.

Billy Bryan's manner of running his train was really unique.

Billy would carry a man free as long as he felt sure that the man was dead broke. But how he hated an impostor!

One day a certain passenger poured such a dire tale of woe into the conductor's ear that Billy carried that poor passenger free that day and every few days after that for three months.

Then came a day when Billy laid off to go fishing. The next morning, when he met the conductor who had taken his place the day before, Billy said:

"Did a fat man with a black beard ride with you yesterday? A poor, down-and-out chap, without money and without transportation? I hope you didn't put him off the train, did you?"

"I threatened to put him off when he began telling me how poor he was," replied the conductor. "But, in the end, he produced a mileage-book."

Billy Bryan gasped. "You say he produced mileage? Oh, well, just wait till he assembles with me once more."

The very next day the fat man with the black beard boarded Billy Bryan's train, and, as usual, said he had no ticket and no money for cash fare.

"Give me your mileage, you robber of the poor railroads, or I'll throw you off this train head first!" Such was Bill's demand and such Bill's threat.

The upshot of the matter was that the fat-

man with the black beard produced a mileage-book. Billy took it, and proceeded to pull out strip after strip of mileage, as a magician pulls strips of paper from a hat. When he had pulled out the last scrap of mileage he handed the fat man the covers, saying:

"There! You owed me that for rides you've had. Don't you ever try to ride on my train again. Take some other train, because I won't carry you."

Billy Bryan was always most accommodating to fishermen. One day three men, bound on a fishing-trip, boarded his train, and said:

"Billy, where's the place to fish to-day?"

Billy told them just where to go, and, moreover, stopped the train in the middle of nowhere purposely to drop them.

"I'll be back here about six o'clock this evening," he said to them; "and don't you fellows keep me waiting here too long. I'll hold the train here for you a reasonable time, but if you don't show up by six-thirty, or seven, or seven-thirty, or some-

where about that time, I'll pull on without you."

Billy Bryan saved money and bought farms and loaned cash on mortgages and foreclosed the mortgages, thus securing still more farms, till finally he became a man of substance. In 1909 he was reputed to be worth several hundred thousand dollars.

Then, suddenly, to the consternation of many, it was learned that Billy Bryan had resigned.

The Eye-See authorities published a note in a local Illinois newspaper, praising Billy Bryan in most flattering terms, and adding that, after thirty years of splendid service for the road, he had resigned in order to devote all his time to looking after his lands, farms, houses, mortgages, stocks, bonds, and other forms of wealth which he had amassed through industry.

When I rode through the Mississippi Valley in 1910, Billy Bryan was living in Carbondale, a man of leisure. The train which he had so long "conducted" is still known as "Billy Bryan's" train.

THE NEWSBOY.

THE newsboy—what a lad he is for working with a will, and bravely putting up a front when everything goes ill, and dashing in with new intent to keep on trying still—the newsboy.

And how he rises with the dawn, when dawns are gray and chill, and trembles with an eagerness his duties to fulfil, and how his cries, ere you arise, come piping far and shrill—the newsboy.

When night has settled o'er the earth and by your fire you rest, you hear him calling, calling still, with endless zeal and zest; he comes and goes without complaint, and does his level best—the newsboy.

He boards the car with elfish leaps, as sparrows gain a limb, he hopes that the conductor will be lenient with him; he drops off backward from the step, all light and safe and trim—the newsboy.

There is a moral in his ways for men sedate to read, a lesson that the wisest heads may profitably heed; he meets unflinchingly life's test, where'er his ways may lead—the newsboy.

And somewhere in the Father's heart I think a corner lies, and somewhere there's a kindly Judge afar off in the skies, for that wee, stalwart citizen, with eager, friendly eyes—the newsboy.—*St. Louis Times.*

SPEED INDICATORS.

A REPORT current in the daily press says: "Passenger-engines on the Baltimore and Ohio are being equipped with speed indicators, so that engineers will have no excuse for exceeding established limits.

"Attached to the device is a paper chart, the registry on which shows the speed on every point of a division. This goes to the superintendent after a run is made, and thus he has before him daily a record of the speed at which trains are run in his territory."

If this is true, it will help the engineers; especially if the idea is to get at the truth, they will welcome the installation of speed indicators as a good thing. The reason for this is that the indicators will also show the delays along the line.

A locomotive engineer of our acquaintance used to say that he got over the road better when the general superintendent's car was attached to the flier, for the simple reason that news of this fact was quietly telegraphed ahead and every station-agent became very quick and very alert when the G. S. was on hand; and as for station baggage-men, you wouldn't know them. They hit the stopping point of the baggage-car door in a way that was wonderful to see, and in went the trunks before you could say "Jack Robinson."

The train was a car heavier, but the detentions were light. The indicators show delays that the engineer is not responsible for, and the G. S. used to wonder why it was not done that way every day.—*Railway and Locomotive Engineer.*



A RAILROAD ACROSTIC

From an Old Scrap Book.

Lo, the long railway train winding and narrow,
Over the trestle-work into the city,
Coming too sure with the speed of an arrow,
On to its wreck without warning or pity.
Moments seem passing the mastery of mortal—
Only a miracle retrieves the error;
Thunders the bridge at its innermost portal,
Increasing and nearing and deepening in terror,
Voices would reach to the gateway of heaven
Ere this wild roar by a cry could be riven.

Even now, steady now, swift go as lightning,
Nerving his arm with its mightiest force,
Gigantic the sinews like iron thews tightening,
In driving the mad engine back on her course.
Now answers the signal of danger already!
Easier backward now, safer and faster!
Every soul blessing the courage so steady,
Redeeming their awe-stricken lives from disaster.

THE STEELED CONSCIENCE.

BY GEORGE ALLAN ENGLAND.

A Man Accomplishes Some Things Which Seem Impossible to the Human Mind.

SYNOPSIS OF PREVIOUS CHAPTERS.

JOHAN GRAHAM, a young artist, discovers among his dead father's effects, a diary which proves that his former guardian, a wealthy lawyer named Simon Dill, has robbed himself and his mother who has since died, of a large fortune accruing from a gold-mine in which Dill and Graham, senior, were once partners. Although engaged to Agnes Dill, the lawyer's daughter, Graham goes to Dill's office, presents his proofs and brands him as a criminal, demanding the money which his father has left him in trust. Dill finally pretends that he is about to make restitution, but by a sudden strategy fires his revolver, grapples with his ward, and, when the police rush in, hands Graham over to them as a robber and assassin. He conceals the diary, which is the sole proof of his own guilt. It is a case of one man's word against another's. Dill, who has dabbled in politics, manages to have Graham prosecuted before a judge whom he put in office. The artist is found guilty and sentenced to five years' imprisonment. During Graham's first month in the penitentiary, he is visited by Dill, who is anxious to learn the attitude of his former ward toward himself and find out whether he intends to even up the score on his release. He tells Graham that he has placed the incriminating diary in a safe-deposit vault and tries to draw him out, but as Graham refuses to utter a single word, he goes away unrewarded. The prisoner chafes at the monotony of his existence, and his sense of justice cries out at the cruelties which he sees being practised about him and learns of from his cell-mate, Piano, who proves to be very much of a philosopher. Piano finally escapes, leaving Graham to bear his misery alone. After four years of imprisonment, Graham is finally given his liberty. As he leaves the penitentiary he is accosted by a stranger whom he soon discovers to be Piano, his former cell-mate, in disguise.

CHAPTER XII.

A Decision.

"RIGHT!" answered the other, smiling. "I see you've got better vision and memory than all the 'flaties' and 'elbows' put together. Why, they've been congratulating themselves on my death for over a year—my death and burial—oh, yes!" He lowered his voice. "But, come along," he added. "Bad climate around here. Very." Again he urged Graham forward.

For a moment Graham thought of resisting; of trying to get clear from Piano. But, after all, why should he? Piano had befriended him in quod. He had taught him many valuable lessons. He had been a pleasant companion. Graham had never in

his life felt so strongly as just this minute the necessity for comradeship, for some one to rely on a little, till things should begin to readjust themselves. He said nothing; but, like a man in a dream, walked on and on beside his former cellmate.

Thus they reached the square, mounted the steps, and took a Boston-bound train. Piano steered him into a far corner of the all but deserted smoker, where they would be free from annoying observation. He produced cigars, and for the first time in more than four eternal years Graham tasted good tobacco. The contrast between his accustomed "state," as prison-weed is called, and real Cuban leaf, filled him with an almost childish content. For, these first few minutes out in the world again, he was as a child to its multitudinous ways.

All the way over the bridge Graham looked with curious eyes at the great, busy,

rushing traffic, the center of life and noisy activities, which seemed as strange to him almost as though he had just landed from another planet. His companion offered no remarks save platitudes. He well understood the confusion in the young man's brain, and, understanding, he waited.

The train turned, slowed, and stopped at the North Station.

"Well, where are you heading for?" asked Piano. "Anything in view?"

"New York to-morrow," answered Graham. "How things are going to turn I don't know, but I suppose I'd better get back. I've still got a little money on deposit there—enough to last for a while, till I can get my bearings. Why?"

"Oh, just a natural interest, that's all. But how about to-day? To-night?"

"Well, I might as well see Barnard, I suppose. Get a loan from him and some decent clothes. Then a hotel. A good scrub. A sleep. Perhaps by to-morrow things won't seem so—so kind of unnatural."

"You'll be all right in a day or two. But—take my advice—steer shy of Barnard for the present."

"Why so?" asked Graham, surprised, as the train pulled out and dipped toward the Subway.

"Do you want the papers to get hold of this? Run items about you and all? Wait. In a week it'll be stale; they won't give it a line. If you need money, it's yours. All you want. Here!"

From his inside pocket he produced a bill-fold.

"No, no!" objected Graham. "I can't do that. Thank you ever so much, but—"

Piano merely laughed as he drew a fifty from among several others of the same denomination and slid it into Graham's pocket.

"No nonsense now!" commanded he. "Not a word of drip or rubbish between you and me! Get fixed up right. Dodge people for a while. Above all, don't talk. Inside of a week the world will look quite differently to you from what it does now. Believe me. I know."

Graham kept silent. He felt curiously uneasy in company with this odd, wise, experienced man who in so many ways knew such infinitudes of things whereof he himself was ignorant. The train slowed for Milk Street.

Piano stood up.

"Well," said he, "here's where I've got to leave you. What hotel?"

Graham named the place he had in mind, the Greenwald.

"All right. Eight o'clock to-night, sharp," answered Piano, assuming an appointment. Before Graham had had time to formulate any reply, Piano had reached the side door. The train stopped, Piano waved a friendly hand, and was gone.

Graham, left alone, frowned and bit his lip. Then he remembered the fifty in his pocket. But he had little time for thought; for at Boylston Street he, too, got out. A minute later, feeling lost and small in the shoving tide of humanity, he was wandering down Washington Street in quest of clothes.

"I guess I'll have to use Piano's money, after all," thought he. "One thing I won't do, and that is—spend the five they gave me over there. I'm going to frame that for a souvenir some day."

Eight o'clock found Graham in a dollar room at the Greenwald. His impulse to indulge in greater luxury he had repressed. Every penny now, he knew, must do full duty till he could make a fresh start.

When Piano knocked, Graham was standing at the open window, looking down into the noisy, crowded street, wondering that all this life had been going on, just the same as ever, during the long, blank years since he had seen it last.

The air was heavy with tobacco-smoke, which the night breeze, as it gently swayed the curtain, could only with difficulty dilute. Graham was in his shirt-sleeves—a tall, somewhat slim figure, pale and wan, yet still erect and with a brave way of holding the chin well up. Not beaten yet, John Graham.

Piano gave him a firm, strong hand on entering, laid his felt hat on the newspapers, drew up a chair, sat down, and keenly observed the change that a few hours had already wrought.

"Almost yourself again, eh?" said he, biting the tip from a cigar. "A week from now the almost will be a quite. Well?"

Graham did not answer at once, but sat down, too, and looked at Piano.

"I'd like to think so," he replied at last. "Do you know, I've—I've been thinking—a lot?"

"Don't!" exclaimed Piano oracularly. "Time enough later. For now, let things drift."

Graham shook his head.

"No," he returned. "To be out in the

world again means that the old thoughts, the old bitterness, everything—it's all come back."

Piano studied him a minute, then smiled slightly.

"You mean the way you were jobbed? That's bothering you?"

"Wouldn't it bother you if you'd—" He checked himself.

The other nodded. "Well, some," said he. "I might as well tell you, first off, that I'm wise. Oh, yes, I know, even though you've never seen fit to give me the whole story. These things get around in the underworld, you understand. No matter about that; the point is, what's next? That's the question, sure as guns!"

Graham wearily sighed. "God knows!" he ejaculated.

"Perhaps. Perhaps not. Coming down from theory to practise, what do you think of this?"

Slowly he took from his pocket some memoranda. He sorted these over, selected a sheet of paper, and handed it to Graham. It read:

SECURITY STORAGE WAREHOUSE COMPANY,
220 SPRING STREET, NEW YORK CITY.

Simon Dill, depositor, one sealed packet.
July 12, 1906.

Nothing but that. Just those few words. Yet Graham, reading them, leaned forward, crumpling the paper in his hand. His eyes stared; his jaw dropped.

"W-w-what?" he gasped.

Piano laughed. "Not too bad, eh?" said he, with amusement.

"But—why—how on earth—" cried Graham, starting from his chair, every muscle tense. "How—"

The other waved a graceful hand.

"A mere trifle," answered he. "I've had that for more than a year. Been keeping it for you. Your affair, not mine. I wasn't going after it. Besides, I've had other things to do. So now, you see, we're back where we were a minute ago when I asked you, What next?"

For a minute Graham could find no answer. He stood there, dumb-stricken, void of any coherent thought, his mind a whirl. In his shaking hand the paper crackled. Piano regarded him with a quizzical, amused expression.

"Come, Switch," said he, "sit down and keep your new linen shirt on. No dramatics now, if you please. That sort of thing's

superfluous between us. Squat! We'll talk things over."

Graham sat down again, breathing heavily.

"You mean that you—I—that there's any way—"

"Somewhat so. It's yours. Two things stand between you and it. One, the law; two, a certain, definite quantity of stone, brick, cement, and steel. A simple problem in mechanics. Are you on?"

"But suppose the case were all reopened? Revised? And justice, justice—The courts—an appeal—"

Piano had to laugh. "You mean," asked he, as a schoolmaster might interrogate a child, "you mean to sit there and put such punk to me? After all the reading and thinking; after all the knowledge you've got, all the first-hand experience you've had with courts? Come out of it. Come, come!"

Graham hung his head, abashed.

"You're right," said he at last, a little recovered from his first strong emotion.

"Right? Of course. Money rules. You get that package, get the stuff and the book, you see? And you'll be fixed every way, everywhere. Otherwise you'll be in bad as long as you live. No way to square things but just that. Think it all over. When you've thought—well, you can always find me, or get news of me, at this address."

He penciled a number, One Hundred and Sixth Street, New York City, on a card, and laid the card on the table.

"Now," said he, rising, "I'm off. There's a little matter waiting for me down-town. It's all up to you. The fifty? Oh, I'm not bothering about that. It came easy."

He took his hat.

"Hold on!" cried Graham. "You—surely you aren't going yet? Why, I haven't heard anything! What room in the—warehouse—or—"

"Time enough for that later," answered Piano, with a quiet smile. "I leave for Gotham on the midnight. Ta-ta!"

Then, while Graham still protested, he nodded amiably and departed. John heard his step die out on the cheap red carpet in the hall.

When he was gone, Graham sat down, buried his head in his hands, and, as on the first night he spent in jail, he thought and thought and thought.

With his bed unslept in, he finally quitted the hotel at about a quarter past eleven and walked down to the South Station.

When the heavy express rolled out of the train-shed two men sat alone together in the smoking compartment of one of the Pullmans. One of these men was shrewd and middle-aged and quiet; the other, dressed in a very new suit, was young, slim, and conspicuously pale. Both had plenty of cigars. As the train pulled away from Back Bay and settled into its stride through the night for the run to Providence, they, too, settled down as for a long, long talk.

CHAPTER XIII.

En Route.

"NOW that you've made up your mind to join us," said Piano, blowing a cloud, "now that you've sized up the whole situation, seen the ease of 'disappearing' from your friends for a while, why, it's naturally up to me to give you a little more insight into things. But, first of all—"

"You're set, then," interrupted Graham, "dead set against doing the thing *for* me, on any terms whatever?"

Piano laughed with an irony that brought a temporary flush to the other's face. "I may be overfond of the legal tender, Switch," he answered, "but as for hiring out on another man's job—no, not much! What? You wouldn't incite to violence, would you? Or put wrong notions into an innocent head? No, no—nothing doing, Switch. Your quarrel, not mine. If you aren't man enough to take your own, then I wash my hands of you once for all, now and forever. That's the prime requisite in our world—nerve is. Whatever else we may or may not be, we have to be men."

Graham hung his head, ashamed. "I guess you don't need to say any more," he answered. "I apologize. Only, you know, the idea of—of—"

"Forget it! You've got too much brain and sand for me to have to point out the obvious any longer. Before we go a bit farther, is it yes or no? Just that."

"Yes, so help me!" exclaimed Graham, fully won over at last. In his eyes shone the strange light that Dill had seen there, only now more strong, more clear. He held out his hand.

Piano took it, in a silent clasp. The two men, so unlike, regarded each other narrowly.

"You'll do," said Piano at last. "I know the breed. It isn't because Johnny Yegg

has a memory ten million miles long and never fails to invite a snitcher to a cold-meat party—it isn't because of that I trust you now. I understand you, maybe, better than you understand yourself. You're the goods!"

Beneath his speech, back of his look, a less fundamentally honest man than Graham might have detected something not quite sincere, something that hinted almost at some veiled ulterior motive; but this Graham did not see. He only looked steadily at his companion, with a strange, intent expression on his face. For a minute there was silence between them, as the train, fast gathering speed, swayed, clattering over switch-points and drummed on, on, into the night.

"The goods, yes, or I'm a parson!" repeated Piano. "You'll need every ounce of nerve you've got, and then some, before you're through."

"Will it be—extremely dangerous?" Graham asked.

"That depends on how you go about it. Depends on the personal equation. Take me, for example. I've 'fallen' more than the average simply because I once in a while let my temper run away with me, and try to grab everything in sight. Another man, more moderate, might never get in bad. Average things up, and I don't suppose that 'crushing' is much more perilous than any business. Especially as our motto is 'Stick and slug!' and the flatties know it."

"You mean they're afraid of—of—" hesitated Graham, loath to speak the word "cracksmen."

"Scared stiff, on the whole," smiled Piano. "Afraid to tackle us, for the most part, let alone pushing a case. They'd rather give us a 'shake-down' or run in push-cart men who haven't got a license. It's safer—lots. If it weren't for 'rats,' they'd make a mighty poor show at settling Johnny Yegg. Look how Chief Wilkie himself, back in 1908, begged Congress for a whacking stool-pigeon fund! I guess that shows something, all right. Look at this, too."

He handed Graham a clipping, neatly pasted on yellow paper. Graham read:

Detective Clifton R. Wooldridge, of the Chicago force, says: "It is to be regretted that every chief of police has not at his disposal a good, liberal secret-service fund, from which he could pay for information regarding this class

of criminals. Of course, such information can come only from some one in close touch with them; and my notion is that a good stool-pigeon of this kind is a source of valuable information and should be well paid for his services. Never pay a pigeon until he delivers the goods, and then you are certain he will not "throw" you.

"Pretty much of an admission, eh?" said Piano. "As for the pigeons, once we spot 'em—well, we clip their wings all right enough. We're a close-hanging, hard-hitting crowd, sure as guns. Rest easy, old man. You've got less to worry over than the average bank-clerk."

"Oh, it wasn't that I was thinking about, anyhow," answered Graham. "What occurred to me was this: Here I am, green as paint, stacking into a game that's one of the hardest and most skillful and brainy of any in the world. Now, then, how—"

"I understand. Why, of course, Switch, you can't graduate with a degree of Past-master Peterman in one night, or ten. But with your delicate ear and clever fingers, your superior education, it won't take you long. I give you the chance to join the swellest 'mob' on earth. No need for you to start as a 'gay-cat' with fake sores made by creosote, begging with a package of cards, or 'duckets,' as we call them, to spy out the marks.

"No need for you to work into a shinny-mark gang of rough-necks that dub around Podunk post-offices and work with tools weeded from a blacksmith-shop; that use old tin lanterns and iron sledge-hammers, and that don't know any better way than to rip a box to pieces. The sort that make their get-away on a hand-car, and think themselves rolling in the lap of fortune if they split a bundle consisting of stamps, bad checks, a pail of false teeth, and a money-order book. It isn't that sort of a deal you're going to get. No, not by a big, brown jugful!

"Hardly, Switch. You're going to travel with a mighty good imitation of scientists. You're going to find out all about a kind of soup that comes in rubber bottles, and that makes the hardest tool-chest look like cheese. You're going to put your electrical knowledge to the slickest use you ever dreamed of, and to see neat work. Neat? Beautiful!

Graham drew at his cigar. It had gone out, but he failed to notice it. Piano struck a match for him.

"You, I suppose," said Graham, when the smoke was curling again, "you had to—to begin in the—what you call the old-fashioned way?"

"Partly so. When I was serving my apprenticeship, most of the new, scientific methods were unknown as yet. But from the very first I had the advantage of knowing all about safes and vaults. I'd built so many, you see. Yes, and opened so many, too, in cases where the owners had lost the combination. That helped a lot.

"Then, besides, I fell in with Max Shimburn, almost at the start. Max is retired now. It was Max, you know, that invented nearly all the light, modern tools—though he never got a patent or a royalty on any of 'em, more's the pity. I suppose nobody ever lived who could beat him on the job. And nerve? He was a marvel."

"Go on," said Graham, eagerly listening.

"Just as an example, that time after the forty-thousand-dollar break at Whitehaven, Pennsylvania. He got 'dropped,' you remember? No? I forgot that all this is new to you; it's A, B, C to me, you see. They kept him in a hotel overnight at Whitehaven. Handcuffed to a fly cop, he was, and sleeping in the same bed with him, in a room off one where the general super of the agency slept. The super had taken the clothes of both men and locked them in a closet in his own room. The bracelets were 'ratchets,' the safest out. Not much show for a get-away there, you say.

"Listen. Max smuggled the nib of a steel pen between his fingers, and a second before they locked the bracelets he dropped the nib into the ratchet. That tiny bit of steel blocked the bolt, even though the wrister seemed to be safe. About midnight, Max opened the cuff, crept out, reached the hall, went into a guest's room, grabbed off a full outfit of clothes, dressed, and vamoosed. That's going some, eh?"

Graham whistled.

"Right after that," continued Piano, "I helped him on what was my first big crush, the Ocean Bank break, in New York. Our mob cleaned up a bit over a million. I was in with him on the Manhattan Savings Bank job, too; that came to two million seven hundred thousand in cash and bonds. I remember our whole kit was packed in one small handbag; nearly everything his own invention. The swag, though—it took us all to stow and carry it.

"He and I lit out for Belgium after that.

There wasn't any extradition treaty then; it was a lead-pipe. We didn't do much for a while, but finally we both got uneasy. Funny, how hard it is to loaf, once you understand the business, even though you've got plenty of scads. We piped things off, and finally tackled the Provincial Bank of Viveres. Got in bad, too. Five years for Max, ten for me—the longest bit I ever did—and all for a mere tiny trifle. It just shows you the value of looking out for details, that's all."

Piano threw away his cigar and took a fresh one. His face had grown quite serious. Graham looked at him with wonder.

"What happened?" asked he.

"I'll just tell you this, and then we'll turn in," answered Piano. "Lots to do to-morrow. No use rag-chewing all night. But the way we 'broke our legs' over that tenth-rate job is really worth hearing, even though it's humiliating to think about."

"How so?"

"This way. The building was a cinch. We got in, like child's-play, through a back door, by unscrewing an old-fashioned lock. Max set the lock aside, to replace it later, and put the screws in his vest-pocket. I took my shoes off and set them in the bank yard. Well, we inspected the vault—for we were only on a sort of preliminary expedition, anyway—left the building and replaced the lock. One of the screws was missing. We hunted everywhere for it, but couldn't find it. Good reason. It was stuck to a piece of wax in Shinburn's pocket."

"While we were hunting, a patrolling *gendarme* found my shoes. He whistled for help. We didn't dare to run, and both got 'dropped.' Max explained everything—he could talk French like a Frenchman—and soothed things down. They were just going to let us go, when a watchman reported that one of the screws of the lock was missing. They searched us then. Oh, yes, we found out where the screw was, all right enough. So did they. You know the rest."

"You had some time for reflection, all right," commented Graham.

"Oh, just a little. But I learned French myself, so it wasn't all wasted. I learned, too, that no detail is too small to overlook. I partly mastered my temper as well. Yes, I've been in 'stive' since then, but not for long. These American mouse-traps are cinches. But a French bastille—that's different."

"Only for my getting mad so easily, and sometimes overreaching for the spon, I'd be safe enough. Those are faults you won't have to contend with. I've always fought 'em, but I haven't always won out. Another thing I've fought—and you must, too, if ever you get ditched again, is being 'mugged' and Bertilloned. I don't believe a pen in this country has got a really accurate set of my measurements or a decent portrait. As for my finger-prints, I change those once in a while."

He held out his hands, palm up. Graham saw that the tips of the fingers had been cross-hatched with fine cuts, blurring and destroying the telltale marks of identification.

"A few new scars, now and then," remarked Piano casually, "will go a long way toward putting the bulls into a barren pasture. Just a practical point or two, you see, in case you ever need any—which I sincerely hope you won't."

"Thank you," said Graham, not wholly at ease. The look in Piano's curious eye was a trifle disconcerting, as was also the obvious gusto with which, once started, he talked about his exploits. Graham felt relieved when a hand turned the door of the smoking compartment, and a mahogany face, surmounted by a porter's cap, peered in.

"Half pas' one, gemmen," announced an African voice. "Ef yo' gemmen's wantin' to go to baid, yo'r baid is fixed."

"All right," answered Piano. "We'll be ready in a couple of minutes." Then to Graham:

"You take my word for it, old man, Steel's a mighty unsafe thing to put money into. It's bound to break, sure, before we're much older. I've followed the market long enough to know. Security Storage stock's not much better. There's a sensational drop pretty nearly due to arrive, sure as guns. Mark that."

The porter withdrew, murmuring complaints about the hours and habits of brokers in general and his two late passengers in particular.

"Come on, Switch," said the cracksman. "If I keep on talking, I'll never come to an end, so I might as well quit now as later. It's time we both were pounding the ear. Otherwise you'll be dopy when we reach civilization, and that won't do at all. You'll need all the nerve and balance you've got, or can develop, before long. Come on!"

Both men turned in. But long after Piano was contentedly dreaming, Graham lay wide-eyed in the darkness of his berth—which somehow reminded him terribly of a prison-bunk—listening to the stuffy night sounds in the sleeper, the swish-swish of the curtains, and the clattering music of the wheels upon the metal. He was thinking, too, of all that he had heard; wondering feverishly about all that, for weal or wo, the future held for him.

CHAPTER XIV.

The "Swell Mob."

IT may seem strange, pausing now on the threshold of Graham's new life, that the man should have needed so much hard experience of present-day law and order; so much thought, reading, and persuasion, before abandoning once for all the methods of conventionality, before definitely throwing in his lot with the only men who could now help him win his own. Yet you must remember that Graham was no ordinary fellow, of vague or formless principles; that all his life he had been trained to believe, had been nurtured all through his boyhood, all through his college days, as is the custom of colleges, in the faith that the bases of society are just, and that abstract principles of right determine the actual working-out of the world's problems.

Hence it was that even at the very last moment he still hesitated, beating about for some hand-hold of belief, some footing of hope that there perhaps might be some other way. Only when he had come to see that nothing else remained save to make a law unto himself, to reverse by personal action the verdict rendered through perjury and guile—only then, with a clear conscience, did he face his own soul, and realize that if right were ever to be his, it must come through what the world calls wrong.

In company with Piano, who advised him now to let his beard and mustache grow for greater safety, he met, next morning, two members of the "mob" in which he had at last decided to enlist himself as an apprentice. He had once read in a highly-colored magazine article a description of a yeggman's "dump" or hang-out. This had led him to expect, perhaps, some disorderly den on the East Side, in an attic or cellar—a dark room littered with tools, empty bottles, begging-cards, and cigar-

butts, the walls hung with ragged clothes, the air foul and dank. It came rather as a surprise, then, when Piano ushered him into well-kept bachelor apartments, reached by an elevator; on the fifth floor of a house in One Hundred and Sixth Street, not many doors west of the park.

"Welcome to our home, sweet home," said Piano hospitably, closing the outer door behind them. He whistled softly. A step sounded in the hall. Graham turned. Toward him he saw advancing a tall, erect, fine-looking man, with a thoughtful and deep-lined face—a man whose forehead, high and intellectual; whose beard, parted in the middle and brushed away sharply toward either side, gave him the air of a respected and substantial banker, broker, or merchant.

"Here's Switch, at last," said Piano, with a smile. "Switch, shake hands, with Adam. You'll get on famously together, I know, even though you may not always agree on matters of theory. Don't argue with Adam, whatever you do," he added jestingly to Graham. "I warn you, now, there isn't one of us can floor him on logic."

The older man gave no heed to this sally, but extended a fine and strong hand to Graham.

"I'm glad to see you," said he quite simply, with a marked German accent. "Here, I take your hat, so." He waved toward the room at the front end of the hallway.

Piano led the newcomer thither. Graham found himself in a comfortable sitting-room. His first glance showed him book-cases, a morris-chair or two, a table covered with magazines and papers. In one of the chairs another man was sitting, smoking a long-stemmed, tasselled pipe. The man rose to greet him.

As, again introduced by Piano, Graham shook hands with Tumbler, he noted the man's trim side-whiskers, somewhat bald head, and well-moulded mouth.

"Sit down," said Tumbler pleasantly, though with a sharp and steady look. He indicated a chair, then shoved a box of cigars toward Graham; who, to relieve the embarrassment that had got hold on him, took one and lighted it. He sat down, crossed his legs, looked from one to the other of the men, and—finding nothing pertinent to say—said nothing.

But his self-consciousness lasted not a minute. If he expected to be quizzed or put through any course of sprouts, pleasant

disappointment came at once. Adam looked in through the door just long enough to excuse himself, on the ground that he couldn't leave a little experiment he was carrying on at the back of the flat, and withdrew.

Piano and Tumbler fell into an easy conversation about the base-ball pennant prospects, then drifted from that to the state of the market, and so to the subject of high prices. Graham found himself presently taking a third hand in the talk, just as he would have done with any other men of equal culture. Half an hour passed, and the air of the room was gray before so much as any mention of "shop" came up.

"By the way, where's Dave?" asked Piano, glancing at his watch. "Here it is almost eleven. I thought he'd be here before now."

"Dave?" answered the other, dropping into the curious lingo whereof Graham had already heard a little from Piano. "Oh, he's out after a little dooley—for to-night, you know. Had to go across to Jersey for it, to Donahue's. He said he was going to fix things with a 'gager' over there, too; Mandelbaum, I think he said the name was. Powell's getting a bit risky, since the front office bulls butted in there last week."

"That's right, too," assented Piano, as he pocketed his watch again. "Some gabby or other must have been bawling. Maybe we'll find out who, and hand him one yet, before we're done. Well—no use worrying about that. Got the route laid out, drags mapped, bait planted, and all?"

Tumbler nodded, opened a drawer in his table, and took out a note-book and a road-map of southern Connecticut. The map he spread upon the floor. He drew from his pocket a gold-mounted fountain-pen, and traced a line irregularly from New York City to Southbridge.

"This," said he judicially, "is the best we can do, taking everything into consideration, state of the roads, various town ordinances about speed, and so forth." He turned to Graham. "Perhaps you don't quite understand everything as yet," he explained.

"A drag, that's what we call a street, you know; and planting the bait means getting a line on the building, the gopher—the safe, I mean—the watchmen, and all that sort of thing. We're going to take a run out to-night in the machine. Piano's told you? No? Well, no matter. You just keep your lamps lit, and by to-morrow

you'll be a whole lot wiser than you are to-day."

He slid from the chair, knelt and studied the map with scrupulous attention. Graham, an idea occurring to him, turned and looked at Piano with raised eyebrows. "He—he knows about my case?" whispered he.

Piano shook his head. "Only me," he answered, tapping his breast. Then he touched his lips. Graham saw again the curious, subtle look in Piano's eyes; he wondered, vaguely, what interest the man could have, after all, in thus taking on as a member of the mob, in thus imitating him. But though the thought gave him a moment's uneasy reflection, he put it away. Whatever the motive, come what might, here he was. That much was certain, anyhow. He stood at last on the first round of the ladder of achievement, of revindication. Nothing else mattered much. Too late, now, for any hesitation, any notion of withdrawal. He looked, while Tumbler's pen indicated an ink-marked spot on the map.

"Here she is," said Tumbler, reflectively. "We go in at the east end of the town, by way of Hotchkiss Street. Cross the railroad. Take the second stem to the left. Leave the machine back of the Baptist Church. Then all we have to do is go west one block, take the alley running from High to Wilson, and—get busy. A pipe! By half-past one we ought to be out of town again and making things buzz for home, eh?"

He looked up with a smile. "About to-morrow morning," he added, "the South-bridge National Bank people, and the bulls and 'pencils'—the reporters, you know—will be having something to speculate about. Maybe there'll be a few thankful bank-officers, at that. It happens more than once," he explained, as in answer to Graham's surprised look, "that a man short in his accounts welcomes us like we were angels of glory. Welcomes us? Why, don't you remember that East Warwick mark we were tipped off to by the cashier?" he asked Piano.

"Saved *him* from stripes, all right! As for us—well, we got all that was left, anyhow, little as it was. Banks, you know," turning to Graham, "are put up the flue about ten times by the men inside to once by *us*."

Then, as Graham's eyes widened, Tum-

bler laughed: "Oh, that's only one of the ten thousand things you've still to learn about the world as it is, not as most people think it is!"

They talked till lunch-time, laying out all the details of the expected raid. Graham, of course, listened much and said little, but what he said betrayed a quick perception and so ready an understanding that both Piano and Tumbler now and then paused to look at him and nod approvingly. At the meal, served in right decent style in the dining-room by an old, close-lipped man whom the new-comer spotted at once as having done time, Adam thawed out and became argumentative. He tried to start a discussion of the tariff, but, nobody venturing to oppose him, had to drop it for very lack of antagonism.

The conversation swung round to shop-talk, after a while, interspersed with an astonishing profusion of "monicas" or nicknames in the profession, of technicalities, and all but incomprehensible expressions. But Graham sat tight, kept his ears open, and—what with the use of his brains, what with the occasional explanation that came his way—began already to feel himself less a stranger to their thought and life than when he had entered the flat.

Toward three o'clock that afternoon Dave came in. He was a short, muscular fellow, beardless, and brown-eyed. His appearance suggested that of a well-to-do young business man. He outlined what he had that morning done: the arrangements he had made with Mandelbaum, the "fence" or "phony-broker," who, he said, would dispose at a fair rate for them of any negotiable bonds or papers captured in the forthcoming crush.

"You understand, of course," Piano explained to Switch, "that we can push out cash or stamps, ourselves; but when it comes to paper, then we have to be careful. A first-class phony-broker is one of the most important things we have to look out for. It's a dangerous stunt, that sort of thing. We had a man once who got caught with a bundle of railroad stocks.

They got him bang to rights and would have shoved him, only he'd already taken the precaution of putting the stocks on the sidewalk and stepping on them with a muddy boot. So, of course, when he swore he'd found them, they couldn't prove he hadn't. Yes, naturally we lost the stuff, but, then, the broker saved his skin, which was some-

thing. See the value of detail? It's just what I told you before—perpetual vigilance, and so forth. That's a dodge worth knowing, in a pinch, that muddy boot racket is."

The others laughed at the reminiscence. Switch stowed that information away with all the rest. He remembered, too, the rather startling sight they showed him in the little kitchen—a pan of hot water steaming on the gas-stove, with half a dozen yellow sticks of dynamite lying at the bottom, dynamite which Dave had brought from Jersey City, where he had purchased it from his contractor friend, Donahue.

"That's the way we make our 'soup' or 'grease' or 'sap' or 'oil,' whichever you want to call it," Dave explained. "Only the low-class 'gopherman' still uses powder or 'sawdust'-dynamite. With nerve enough to do it right, anybody can soak the stuff, pour off the water, and collect the nitro-glycerine. Of course, if it gets too hot, or anything happens—good-by; but that's—part of the job not to let anything happen. See here, now."

While Graham watched him a trifle nervously, he took up the tin and decanted the water into the sink. Very skilfully he did it, leaving a yellowish liquid at the bottom.

"See that?" he added, with nonchalance. "Well, if anything should just happen to make that let go, I guess pieces of this kitchen would land somewhere over at College Point. Maybe Jamaica. Oh, it would make the boss noise, all right enough. But, you see, we've got accidents guarded against, like this."

He set the pan down, took a rubber flask from a cupboard, and with a marvelously steady hand poured the deadly liquid into it. This done, he corked the flask with a rubber stopper, and set it back on the shelf.

"I love my roast beef, but oh you soup!" he laughed; and Piano joined him, as did Tumbler, who stood looking through the door as unconcernedly as though the nitro had been so much coffee.

That night, at half-past nine, Piano called up the Union Garage and ordered the machine sent round.

"It certainly looks good to muh," he remarked, casting an eye out the window at the dark and cloudy sky. "If it comes on to rain, so much the better. Most mobs only do their plant-hunting in summer, and leave the real work till winter, when the

nights are long. That's why we reverse the deal. They aren't expecting trouble, in summer; it's twice the cinch, you see?"

Graham nodded.

"Do you know," said he, "I've been thinking about the way I had my fingerprints taken, back in Pemberton Square. What would be the matter with all of us wearing gloves? Then, if anybody should happen to leave a mark, or anything—"

Dave slapped him on the shoulder.

"Good idea!" he assented. "No flies on that, none whatever. Gloves it is, for everybody!" Tumbler seemed pleased; even old Adam smiled.

"I imagine, my frient," said he slowly in his labored English, "dat you will haf many goot suggestions to make, before you been mit us a very long while." He turned to Dave. "De spreader? You got him?"

"Yes," answered Dave. "Piano's going to take charge of that and the wax. I suppose you'll carry the keister. As for me, the oil's about enough for me to look after. Well, are we ready?"

"Where do I fit?" asked Graham, beginning to tingle with a strange new excitement, as the men took their coats from the hat-tree and began getting into them.

"You, buddy? Oh, here—this puffing-rod will do for a starter for you," said Dave. He slid a revolver into Graham's pocket. Graham shuddered, so strongly the act brought back to him memories of what had happened in Dill's office more than four years ago. But he said nothing.

Five minutes later they were all in the racing-car, a quiet, respectable little party, as of well-to-do amateur motorists.

Piano, at the wheel, threw in the low-speed clutch; the car coughed, trembled, then with gathering momentum slid down the asphalt slope of One Hundred and Sixth Street toward the park.

Graham realized, vaguely as in a dream, that at last he was embarked upon a course whence there could be no turning back, upon the greatest adventure of his life, rich with possibilities of most tremendous moment for good—or ill.

CHAPTER XV.

His First "Crush."

THE car turned north, skirted the park, swung east into One Hundred and Tenth Street, and made a smooth, quick

run 'cross-town to Third Avenue. Here it right-angled again, up the avenue, crossed the bridge, and before long veered into Boston Road. Piano guided it with sure and dexterous skill. Perhaps the knowledge that an accident of any sort might disclose the sort of freight they carried, even if it did not set off the nitro-glycerine and sprinkle them broadcast over the scenery, added steadiness to his grip.

With him on the front seat was Adam. Dave, Tumbler, and Graham sat together in the tonneau. In Dave's right-hand breast pocket reposed the bottle of "sap." Dave, therefore, sat at the right of the other two lest any one should happen to jostle him.

Under the seat lay the satchel and a suitcase. The former contained the kit, while in the latter was concealed the powerful "spreader," the only bulky tool they counted on having to use.

"No way in this world for us to fall down to-night," remarked Tumbler, pulling his flat English cap down tight as the wind began to tug at it on the stretch between Prospect Hill and Pelham Manor.

"An hour and a half will bring us to Southbridge; two hours at the outside. Say midnight. By twelve-fifteen we ought to be in the bank. You've got the crib down cold, you say. I reckon we'll be headed for home by one, maybe sooner."

The talk ran on and on, with Graham attentive to every word, learning from every syllable things which the average man has no conception of. Faster, faster still sped the racing-car. It ate the distance greedily to New Rochelle, its acetylene lamps flinging long, tremulous shafts of radiance far ahead. Through the town it slowed a bit, then hit the pace once more toward Mamaroneck.

As it passed through Port Chester they heard bells striking eleven. Presently Stamford lay behind. Glenbrook and Norwalk followed soon, the car never skipping an explosion, the exhaust drumming its soft music, *Brrrrrrr!* with the precision of the perfect mechanism it was.

There was scant talk now. Each of the party was busy with his own thoughts, as the goal drew nearer, nearer, in the starless night.

North, now, the road ran, through a diversified country of woods and rolling hills. In places the car ran into sand; then, as a fine and misty rain settled down, into slippery skin-coats of mud that caused the tires

to skid a bit. They paused for a few minutes north of New Canaan to get the chains out of the box and put them on the rear wheels.

"We can't afford to take any chances of any kind, you see," remarked Tumbler to Graham, as the car got under way once more. "It's all a matter of details, from the plant-hunting to the getaway. Every time a break fails, you can lay it to some oversight.

"They say everybody in this line or any other always overlooks some one point. That's why the 'fingers' once in a while cop us out, some of us. If they weren't boobs and mutton-heads almost from A to Z, they'd flop more of us, but as things are, we're decently safe."

"So Piano, here, was telling me," answered Graham. "But—"

"Shhh! Cut it!" growled Piano from his place at the wheel. "Time enough for gas later. Stow that, and keep your eyes peeled, you windy gervers! No hoptalk now!"

Silence followed, save for the purring of the car, the occasional squash and splatter as it struck a muddy rut. Into the men's faces drove the misty rain. They muffled up their great-coat collars about their ears. On, on through the dark they sped, their machine seemingly drawn and guided forward by the ribbons of light it jetted out before.

"Two miles more," at last said Dave, touching Piano on the shoulder. Piano slackened speed and turned off the lights. Thereafter they trundled along at a slow jog, meeting nobody save once a belated farmer with a frightened horse that ran him into the ditch. He swore violently at them, but they replied not even by a laugh or a jibe.

Cautiously they crept into the town. Here and there a window still showed its square-paned patch of illumination, but for the most part the place seemed wrapped in sleep. The street-lights, few and feeble, did no more than cast faint rays across their way. Down one side-street Graham saw a solitary and dejected-looking policeman, but this guardian of the peace did not even so much as notice their noiseless passage. They followed closely the route laid down for them by Tumbler. Graham, with increasing nervousness, took note of everything—the railroad crossing, the entrance into the second street to the left, then the

big, white church with its tall pillars and its square spire fading eerily up into the dark.

Unseen, the car trundled into the open space beside the church, turned and stopped behind it, out of sight of the street. Adam climbed out first, then Piano. Dave descended very carefully, holding his hand to his breast where lay the flask.

"All right, you now!" whispered Tumbler to Graham. He, too, got out. "Twelve-fifteen," he heard Piano say. "Fine and dandy!" Then Tumbler added, "Here, come now, take these!" and handed out first the suit-case, then the satchel.

Presently the five men, under cover of darkness, had one by one issued out onto High Street, through an alley. Not a soul was in sight. "Hold that gun ready," whispered Piano. "I've got one, too. Don't wait a minute in case of trouble, but throw it into John Law for all you're worth!"

Rapidly and silently as specters they turned down another unlighted alley, following the lead of Tumbler. Graham, straining his eyes, could make out vaguely the dark forms of the yeggmen. Suddenly Tumbler went "Stttt!" and Graham saw a little white circle of light fall on some iron bars. He perceived, then, that Tumbler held an electric flash-lamp. By its dimly-reflected light he saw the dim, eager faces of the rest.

"The spreader, here!" he heard Piano say in an undertone. Somebody was kneeling in the mud. Came a click, as the suit-case opened. Then the electric flash showed a curious apparatus being adjusted to the bars. All that Graham could see was just this thing and a pair of hands at work; the effect was uncanny. He shivered slightly, despite the drizzling closeness of the night, but only gripped his "cannon" more tightly. "Stick and slug!" the motto came to his mind. He waited, breathlessly, watching the work at the barred window.

The spreader, he saw, was a combination of simplicity and marvelous force, one of the most ingenious and useful tools imaginable. As nearly as he could make out, it consisted of a solid steel screw with two grip-nuts of steel at one end and a massive hub-shaped nut in the middle. This hub was pierced with holes.

He saw hands adjust the thing so that one end rested against the masonry window-

jamb while the other engaged a thick vertical bar.

"Hold 'er!" commanded Piano.

Other hands held the thing in place; then a strong and heavy lever was slid home in one of the holes. Graham saw the lever turning the hub-like nut. The spreader lengthened. "All right now," whispered Piano. "Just keep a light on here, and I'll have things loose in a jiffy!"

He withdrew the lever, put it again into another hole, and again pulled it down. Thus, one hole by one, he turned the great nut. The bar began to bend. Braced though it was, above and below, by transverse irons, the metal had to yield. Steadily round and round went the nut; steadily the bar bellied out. All at once, *Snap!* it went. Graham saw that it had been pulled clean in two, about three inches from its insertion into the stone-work.

"Jove!" thought he. "What chance has any bar got against that?"

Hardly two minutes later another bar was broken, and both had been bent up out of the way.

During this time Adam had opened the satchel, had taken out and screwed together a high-grade steel sectional jimmy, and was now prepared to force the window, inside the bars.

The jimmy bit. A hand put a pebble under it, for a fulcrum. Adam and Tumbler threw their weight onto its outer end, while Dave—with the rubber bottle in his pocket—stood back out of harm's way. A catch snapped. The sash went up. Graham caught his breath.

"Flash the glim in there!" whispered Piano. The little white light glinted here, there, showing an office with heavy and old-fashioned furniture. By the vague reflection Graham caught a little spark of light from a revolver in Dave's hand.

"Come on, boys!" he heard Adam say. "Here, Dave, giff me de oil!"

As had been previously arranged, Tumbler and Dave were to be the "outside men," leaving Adam and Piano for the inside work. Graham, too, was to accompany them, not only as a guard, but also because Piano had insisted on giving him a chance to learn the game—a game which the others, naturally, already understood.

So, Graham realized, the moment was now come when for the first time in his life he was to enter, without warrant of permission or law, the property of other

men; when for the first time he was to see the actual working of experienced yeggs. He forgot almost to breathe. The excitement of the game was on him; his eyes stared through the gloom; in his ears he heard the blood-stream rushing fast.

Easily, quietly, Adam peered in, then slid a leg over the sill, stooped through the opening, drew his other leg in, and dropped noiselessly to the floor. He reached out, and from Dave took the rubber flask.

"You next!" said Piano. Graham clambered after Adam, while Tumbler lighted the way for him with the flash-lamp. Last came Piano. Tumbler handed him the light.

"Give us twenty minutes," said Piano, "and we're with you. Shoot if you have to; but first, diplomacy!"

"Go on, go on!" answered Tumbler. "What d'you think I am?—A fritzer?"

Piano made no reply, but, pointing the little beam of light this way and that, advanced on noiseless, soft-shod feet across the office.

"You, Switch," he continued, "be ready! If we run into the watchman, there'll be a muss, sure. Take-a hand!"

They reached a door, at the left. Adam tried it.

"Locked, off course," said he. Piano directed the light into the satchel; the German chose a long-nosed pair of key-nippers with hollowed-out jaws. Deftly he manipulated this in the keyhole, seized the stub of the key and gently turned it. A moment later the door swung clear.

While Piano flashed the light inside and peeked through—an anxious moment, always, for every crook that breaks and enters—Graham stood listening keenly. He, too, looked. He saw dimly a wire grating, some desks and stools, and recognized the conventional fittings of a bank office. But he had not long to wait; for now the others were advancing.

Silently they all three entered the inner room. Adam closed the door. Then they stole along behind the desks. The two yeggs knew their way perfectly, although they never yet had seen the place. Dave's reconnaissance had made all plain to them. In a few seconds they had reached the further end of the grating. Now they must turn to the right and cross the floor of the bank. The vault, they knew, was at the back.

Like wraiths the little "three-string" ad-

vanced toward it. But, all at once, a sound came from somewhere off to the left—a sound of stealthy footsteps. Graham's heart leaped. He knew, instinctively, that a watchman had perceived them and was creeping down a corridor, the dark opening of which he could just make out, as greater blackness in the gloom, at the far corner. He felt a tug at his sleeve and ran forward, with the other two, into the shelter of a little alcove where stood two tables for the use of patrons of the bank.

Unbreathing, the trio waited. On came the watchman. They saw a yellow light trembling along the floor; then, quite suddenly, a dark figure appeared. "Uhhh!" they heard a grunt of surprise.

Up went the figure's arm, in the unmistakable gesture of a man about to shoot. A pistol-hammer clicked. But Graham, at one side, leaped like a panther. He drove his fist at the man. It landed—hard. Graham heard the pistol clatter on the marble.

The watchman's cry died, choked in its inception by Piano's grip on his throat. Adam, daring not to take a hand because of the nitro, stood back. "Tie him, dat's all!" he whispered sibilantly. The three fighting men went down in a heap, Piano's clutch never weakening. The watcher's lantern flickered out, ill-smelling.

"In my right-hand pocket—the cord!" commanded Piano. Graham fumbled it out, trembling with eagerness, a strange and wild passion filling him. With a quick dexterity he never knew lay in him, he triced the man. Piano gagged him with his own handkerchief. Inside of a minute and a half the watchman, safely disposed of, lay under the tables in the alcove.

They heard his labored breathing, the creaking of his futile, dumb struggles as they stood there listening to determine whether any further interference might be expected.

But all was still. Except for the trickle of water, somewhere, from a broken rain-spout, no sound at all.

"Vell, boys, now to vork!" said Adam.

They left the watchman and again advanced toward the vault.

"Hmmm! Old-fashioned brick affair," commented Piano scornfully, running the circle of electric light rapidly over the glazed surface of the bricks, so assuring to depositors, so really useless. "If we wanted to bash that in with a sledge, I guess it wouldn't take long, but the oil's quicker.

You watch, now," he added to Graham. "You're going to learn a thing or two, believe me!"

His inspection of the vault finished, he glinted the light over the door, noting with scorn the apparent solidity of the smooth and handsomely-painted plates, of the huge hinges, and the polished knob and dial. Nickel and scroll-work never could fool *him*.

"I guess she won't bother us much!" commented he. "Look at that crack!" And with his forefinger he indicated a tiny line between the door and the jamb that the ordinary observer would never so much as have noticed.

An old-fashioned worker would have taken a punch and hammer, made a dent for his drill-point to catch on, then with lots of elbow-grease and sweat would have bored a hole. Into this he would with bellows and funnel have blown some "puff" and touched it off with a fuse. Nothing like that for Adam and Piano!

Already Adam was softening up, in his deft hands, a mass of soap and wax, putty-like and sticky. This stuff he quickly spread all up and down the edges of the door, the top and bottom, leaving only a little space where the crack had attracted Piano's scornful attention.

Then, while Graham watched him with keen attention, he fashioned a small cup at the bottom of the unsoaped space.

"Dere!" sighed he. "Now for de grease. You get de cap and battery."

Carefully he drew the rubber bottle from his pocket, uncorked it, and with a steady hand poured part of its contents into the cup. The formidable liquid seeped down into the crack, filling the air-tight space between the door and the jamb. Piano, in the meanwhile, had taken from the satchel a roll of insulated wire and a dry-battery, together with a detonating-cap. He set the cap in the soap-cup, made the proper attachment and uncoiled the wire, while Graham held the light for him. Adam poured a few more drops of the nitro-glycerine over the cap.

"Now," said he, "ve blanket her and den set her off."

Quickly they piled some chairs against the vault and covered everything with a heavy rug. The wires were then led off to the alcove, out of the direct line of explosion.

"All ready?" asked Piano, totally indif-

ferent to the writhing and groaning of the pinioned watchman.

"All retty," answered Adam. "Let her go!"

Graham, tense with excitement, saw a tiny spark in the gloom. Instantly a dull and muffled shock thudded through the room, hardly louder than the slamming of a very heavy door. The chairs tipped over, slid and fell to the floor. The echoes ceased. All grew still.

Piano snatched the lamp from Graham's trembling hand. In a second he was throwing light over the door, while Graham stood eagerly watching and Adam shoved the chairs away. Graham heard Piano laugh. He saw that both hinges had been broken off in a jagged line, and that an irregular crack extended from the dial half-way up the edge.

"Giff her anodder, and she'll cave," said Adam, calm and judicious as though it were merely a question of an obstinate ice-box.

Fifteen minutes later the outer door had been blown again and the shattered pieces laid aside, the inner one opened merely by Piano's delicate manipulation—the lock was a simple combination, of no real difficulty—and the "damper" or cash-drawer ripped open with another and smaller charge.

Before Graham's astonished eyes appeared thick stacks of bills, neatly bound with paper strips, together with some dozen coin-sacks of stout canvas. His hand shook so that he could hardly keep the pencil of light on the treasure.

"Well," remarked Piano, "this looks all right, don't it? Dave's a good steerer, that's no dream. He certainly didn't put us up against an empty 'bloomer' *this* time!" With entire coolness, as he spoke, he and Adam were cleaning out the drawer. "Dave has a way with him," he added, "of finding out just when deposits are heaviest, that beats all creation."

"Deposits may be heavy here to-night," chuckled Adam, "but diwidend-checks will be light to-morrow. Most off dis 'darb,' you know," he explained to Graham, "belongs to de Inter-City Tramway Corporation. Dey got to go shy, for a while, on buyin' franchises from honest and hard-vorkin' law-makers, eh, vot?"

So saying, he replaced the tools in the satchel, stowed away the dry-battery and the leading-wires, and then, with Piano's help, carefully packed in the money. Two

bundles that would not fit he stowed in his pockets. He locked the bag.

They left the vault then, and came back into the large, dark, silent room. They set the chairs up, and by excess of professional pride in neatness laid the rug again. Piano took the light, went and flickered it over the watchman to assure himself the fellow was in no danger of suffocation.

"Sorry we've got to leave you side-tracked that way till morning," he apologized with mock politeness, "but there's no way out of it."

"*Aber ja*, maybe," contradicted Adam. He felt his way over to the telephone and unhooked the receiver. When the exchange answered, he casually remarked:

"Send somebody down to de First National, ven you get roundt to it. Dere's a man in drouble here." Then he hung up laughing.

"I guess dat vill relief him pooty soon," said he. "Perhaps, next time, he von't be so anxious to mix'v it de bull-busters. Vell, boys, now ve go. Ve got time enough, but none to loose. Raus!"

Quickly they retraced their line of entrance and rejoined the others. They packed the spreader, distributed the burdens, and by separate ways, already decided upon, reached the motor which was standing ready behind the church.

Dave cranked the engine. It caught. They all climbed in.

Easily the car slipped away. Just before it reached the railway crossing they heard a trilling whistle, the rapping of a night-stick, and, soon thereafter, boots running rapidly over cobble-stones.

But, as Piano let out the powerful machine, the sleeping town vanished. It faded away behind them in the dark; and presently they heard no sound save the swift pulsing of the engine and the rush of the night-wind against their faces.

CHAPTER XVI.

Progress and a Piece of News.

THE end of August found Graham well broken to the fascinating work, no longer a mere "filler-in," but a useful, serviceable, and respected member of probably the swellest mob that ever operated in America. The newspapers, that summer, chronicled a long series of unusually daring crushes, now here, now there, within a

radius of a hundred miles from New York City. Sometimes two breaks would occur in a single night, miles apart, yet showing evidences of having been put through by the same mysterious gang, not one member of which could be rounded up by the authorities.

Many an old-time suspect, the miserable "Prussian" or tramp, had to be ditched or put in "stir" as a substitute for the real men or as a sop to public opinion. Like lightning, that never strikes twice in the same place, the mob could never be forestalled. Its "finders" or "plant-hunters," the police knew, must be marvelously clever.

Graham served in that capacity on several occasions. His keen powers of observation and his high natural intelligence made him invaluable. Rewards offered by city, county, or State officers brought no results. Stone and steel proved no effective barriers. No clues were ever left save an auto-track which became obliterated in a few miles. The old-time hand-car getaways became things of simplicity itself to trace, beside this modern mystification.

Graham lived at the flat all this time. He made no friends outside. He let his beard grow, as Piano had advised, and trimmed it to give himself the appearance of, indeed, what he really was—a young professional man. Though he shared with the others in the brassing-up, he carefully saved all this money and kept a strict private account of it, with the amount, place where taken, and date, set down in business-like form. What money he spent was all his own, drawn through an intermediary from his bank where he still had between three and four hundred dollars. Not one of the mob suspected that he ever intended to return to the upper world again.

Piano, of course, knew what had led him to join the gang; but Piano kept a close mouth. Graham, when one day repaying the fifty that had been loaned him in Boston, asked Piano point-blank his motive in having thus taken him into so close a circle. Piano with an apparent equal frankness answered that the underworld needed just such talents of eye, ear and brain as Graham possessed. Graham saw clearly that his teacher entertained hopes of bringing him permanently into the work. That idea, he finally decided, was all that lay in Piano's mind; though once in a while some little uneasy suspicion of possibly another

motive, not quite so clear, would force itself upon his unwilling attention.

Occasionally Piano would bring up the matter of the Security Storage Warehouse and what lay therein, as though to stimulate Graham's interest. Yet for the most part that subject was not touched upon. Two or three times Graham showed impatience to be at the job; but then Piano always restrained him, counseling patience and greater knowledge.

Once Graham and he walked through Spring Street. They glanced up at the huge building of concrete and steel, impregnable as the fastnesses of Carcassonne were to any medieval warrior.

"A hard crib, that," Piano remarked, as they strolled on, not venturing to delay very long before the warehouse. "I tell you, Switch, the man who can crack *that*, deserves the title of Caunfort Ladran—which means a top-notch, boss, A-One person of quality.

"It's certainly a problem worthy of a master. No mush of a twenty-two-karat worker will ever solve it. Getting inside the building is only half the game. The rooms, once you get at them, are built of heavy armor plate and concrete. No chance to use the soup, in there, because of half-a-dozen watchmen and also because it wouldn't do any good.

I read in a scientific review, while it was being built, just how the room walls and the doors were constructed of layers of tool-steel and soft iron, all fastened by invisible screws so arranged that each one ends against solid metal. The bigger vaults are surrounded with railroad-iron, with the T's of the rails dovetailing into each other.

"There's no later word than this, in protection, I'm sorry to say. The warehouse people advertise that their place is absolutely proof against fire, water and the fraternity. We've got a little planning yet to do, you and I, before we go against it. The best we know, yet, is the good old nitroglycerine, but—" Piano shook his head as though in despair. "Old Dill was no dead one," he continued, "when he shoved the stuff away just where he did. He's a wise boy, sure as guns!"

All the way back to the flat, Graham was pondering, studying, thinking. The problem seemed insoluble; but the future, he knew, might bring the answer to that riddle as to every other.

(To be continued.)



The Railroad Man's Brain Teasers.

Merry Moments in Mathematics for the Methodical Minds
of the Masters of Mensuration.

DAN M. POWELL, Black River, Washington, who has sent us some good ones in the past, wants you to answer this:

(14) On a cold day a flagman sees a puff of steam from an engine whistle, and between 9 and 10 seconds later hears the whistle. How far away is the train?

An "Ex-railroader," Andover, Massachusetts, sends in the following:

(15) A conductor starts out with a train of cars. At station No. 1 he sets off half his cars and half a car over. At station No. 2 he sets off half of what is left and half a car over. At station No. 3 he again sets off half of what is left and half a car over. At station No. 4 he also sets off half of what is left and half a car over. He then sees that he has set off the entire number of cars in the train. How many did he start out with?

ANSWERS TO NOVEMBER TEASERS.

(10) Fourteen. There are seven No. 1's out of Chicago when you leave San Francisco, and one leaves each day until you arrive.

(11) 30,294 29-100 square feet.

(12) $2\frac{1}{4}$ times as loud.

(13) Pusher, 2,000 tons. Second engine, 1,600 tons. Proof: First engine, 1,200 tons + pusher, 2,000 = 3,200 tons = twice what second engine pulls. Second engine, 1,600 tons + pusher, 2,000 tons = 3,600 tons = three times what first engine pulls.

We want some new teasers. Do any of you boys know some good ones, similar to those we have published in the last few months? If so, send them to the editor. But do not send any without the correct solution.



ON THE EDITORIAL CARPET.

Merry Christmas to All the Boys and their Mothers, Wives,
Sisters, and Best Girls, from the Man in the Magazine Cab.

IN JANUARY.

THE first train to leave our shops for the glad New Year of 1911 is already made up. We have inspected it thoroughly, gone through every bit of rolling stock, from the fine Atlantic to the observation-car, and it looks to us like a real hummer.

One of the most important things that we shall carry will be the first of a series of articles on freight. It is called "The A B C of Freight." It shows how freight rates are made, how freight is carried, and how it produces a great revenue for the railroad. In short, it is the history of freight so graphically described and so ably written that it will be a great education to all interested in the subject. The author is John B. Thomson, author of "Despatching Trains by Telephone," in this issue.

We have secured from W. J. Knight, the engineer who actually drove the locomotive "General," in its famous Civil-War journey when it was captured near Big Shanty, Georgia, April 12, 1862, his own story of this famous affair. It is a thrilling document, and will prove a valuable addition to the controversy concerning that famous engine.

Another very practical article, especially directed to young railroad men, is written by C. H. Cœ. It contains the sort of stuff that a young man rising in the railroad world ought to know and remember.

Arno Dosch will be with us again with a series of his interesting hairbreadth stories, which are this time entitled "Facing the Music," and Charles Frederick Carter, who has just returned from Europe, will write about the difference between American and European railroads—and there is quite a difference.

Our two new serials, "Mason, the Grizzly," by Chauncey Thomas, and "Through by Sunrise," by William S. Wright, get on the main line in this number. They are going to continue, too, as good as they have begun.

In the short-fiction car for January, we find "The Death Tie," by Robert T. Creel, a story of unusual force, and a particularly good New Year yarn by Robert Fulkerson Hoffman. Then there are three or four others that we do not care to tell about just now, but in order to let you know that the humor tap is wide open, we announce "A Flaggish Flirtation," by Lillian Bennet-Thompson; "Smith's Last Game," by Sumner Lucas;

"The Boes and the Babies," by Augustus Wittfeld, while Honk and Horace have the time of their life trying to make some easy money.

J. E. Smith, who writes "The Observations of a Country Station-Agent," has some Christmas dope about railroad men that will make you want to open the laughter throttle and forget it. Gilson Willets will present one of his best bunches of Middle-West stories.

These are only a few of the good things.

All aboard for the Happy New Year Special!



TELEPHONE vs. TELEGRAPH.

WE sincerely believe that the article on train-despatching by telephone, in this number, is a perfectly fair and impartial presentation of a new movement in an important branch of railroading. But if there are any operators who think otherwise, we will be glad to hear from them. We warmly welcome any claim that you boys may make that will prove that the telephone is a menace to your future.

Some of the letters that we have already received from operators indicate a strong belief that the telephone will eventually replace the telegraph. There is no more chance of this, as we have said elsewhere, than there was of the telegraph replacing the mails when it was first put in operation. Let us take a case in point.

The Pennsylvania Railroad, one of the strongest advocates of the telephone in train-despatching, in an effort to increase the interest in its telegraph school at Bedford, Pennsylvania, has sent broadcast a pamphlet describing the work which it is doing in the institution. The number of students enrolled up to September 1 of this year was two hundred and forty-three, of which number one hundred and fifty-one have graduated and are now employed as telegraphers. The Pennsylvania expects to increase this number materially by its campaign.

The students at the Bedford school are taught practical railroading. The regular railroad telegraph wires are run through the school, and train orders and telegrams are received and transmitted in the same way as is done in regular practice. An automatic sending machine, with a transmitter that can be set at any speed, has been installed in the school. This machine is used to teach the students to receive messages, and, as it

transmits at a uniform speed, it is of great advantage. The school is equipped with a library, as well as a miniature railroad with a perfect block-signal system. In addition to learning telegraphy the students are taught the duties of station-agents in order that they may be prepared to take charge of stations immediately upon graduation.

In the pamphlet which the Pennsylvania Railroad has just issued, it is announced that the school of telegraphy was established for the purpose of educating young men to become telegraph or telephone operators, and, to make it as easy as possible, only a nominal fee is charged. Students graduate in from six to eight months, and, as the pamphlet states, "all graduates are given positions on the Pennsylvania Railroad, with the assurance that if they are faithful in the discharge of their duties, they will have steady employment, and will be placed in line for promotion to higher positions."

Certainly, this does not look as if telegraphy in railroad service was on the wane.

OIL-BURNING ENGINES.

REAR ADMIRAL ROBLEY D. EVANS, U.S.N. (retired), who recently made a tour of the Pacific Coast, says that the oil-burning engines of the different roads he traveled on impressed him as being a step in the right direction. Admiral Evans examined a number of these locomotives personally, and although he is a man who has spent his life on war-ships, and has advocated many new ideas for the navy's betterment, he is a close student of all kinds of mechanism, and his words must carry some weight. He believes that oil will some day supersede coal entirely on our locomotives. If this is so, and it is a statement which cannot be sneezed at, oil will become the most valuable product in the United States. If, as he says, it stands for economy, cleanliness, and safety in locomotive propulsion, the chances are the burning of oil will become more and more a matter of necessity.

"THIRTEEN."

WE are not superstitious, we never have been, and we would gladly borrow thirteen dollars from any one who would lend it to us. We have always believed that calling "13" a hoodoo number is a great mistake, and we have some little proof of our belief in a telegraphic train order sent to us by W. M. Rogers, of the Georgia Railroad, Atlanta, Georgia.

In this particular train order, the number 13 appears eight times. The train order is No. 13, and it was issued August 13, to the conductor and engineer of train No. 13, and says: "No. 212, engine 33, and No. 13, engine 13 will meet at Columbus."

This order was given to the trainman at 4.13 P.M. Aside from this, No. 13 arrived only 13 minutes late, and the engineer had 13 silver dollars in his pocket. And, just for good measure, the order was written on "Form 31."

STRAIGHT-FIGURED CARS.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN the last two or three issues of your magazine I noticed that some of your readers are greatly interested in the straight five-figured car number. Here is a car a little different.

On September 12, 1910, Pennsylvania 123456 left Petoskey, Michigan, loaded with stone for Mayville, Wisconsin. This is a six-figured straight.—A READER, Traverse City, Michigan.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

THAT I. C. car, 12345, seems to have started something, but there are others. How about 41144? We have one. Some time ago, an enterprising reporter with great visions of a "scoop," wrote a fine story about I. C. 41144 coming in from the South with so many hoboes on it that there wasn't even standing room.

I have seen M. D. T. 12345 several times, and there are other cars with straight numbers.

I have not seen I. C. 41144 for a long time, and don't know where it is, but am looking for it.—I. C. Switchman.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your October number, I read about the magic car number, 12345. In the last twenty years

I have been watching for all kinds of car numbers such as straights, full hands, combinations, and policy numbers. In that time I have seen H. V. 12345, gondola; P. R. R. 12345, gondola; P., McK., and Y. 12345, gondola; N. C. R. R. 12345, steel hopper. Has any one of your readers ever seen 123456? A short time ago I saw B. and O. 123456—a steel hopper, going from Glenwood, Pennsylvania, to Willow Grove, loaded with furnace slag. This is the only car I ever saw with that number. I think your last issue is the best of all. THE RAILROAD MAN'S MAGAZINE for mine. There is not a book printed to-day that can give railroad boys, or any other boys, the information that THE RAILROAD MAN'S MAGAZINE can. It is worth twice the money.

H. G. MINEAR,
Pittsburgh, Pennsylvania.

F. W. Wagner, of Newport, Arkansas, writes us that he recently saw car No. 12345, of the National de Mexico pass through his city going south. "I have been looking for 'straight' numbers on railroad-cars for some time," he says, "but this is the first I have ever seen."

ADDITIONAL THANKS.

THANKSGIVING DAY this year brought with it an event for which the traveling public should give added thanks. On November 27,

the Pennsylvania Railroad's tunnels, which have taken seven years to complete, were opened, and a regular train service was inaugurated from the immense Seventh Avenue depot in New York, to all Western points, and for the first time in history, there is an unbroken rail connection between Montauk Point, Long Island, and San Francisco, California. At last, the great Pennsylvania system makes New York City its real Eastern terminal.

On October 5, through the courtesy of the Pennsylvania Railroad officials, a special train, accommodating a party of magazine editors, was run from the New York terminal under the Hudson to the Hackensack Meadows and return, affording an excellent opportunity to inspect the workings of the new system.

The editor of THE RAILROAD MAN'S MAGAZINE made the run in the cab of the huge electric locomotive, and viewed the tunnel construction and the operation of the block system and the great interlocking plant which distributes the trains over the network of tracks at the entrance to the New York terminal.

The inspection of the tunnels and the great depot proved conclusively that the Pennsylvania Railroad has fulfilled all the amazing promises that it made. To-day, the dream of President Cassatt, now dead, has come true in the completion of the greatest railroad terminal the world has ever known.

WE STAND CORRECTED.

ONE of our readers writes in to us from Ann Arbor, Michigan, that he has got the goods on us this time for sure. Our critic is Cal Stewart, and we wish to thank him for pointing out a bull in our October number where Mr. Dosch, in his "Moments of Emergency," tells of John Crowley's runaway switch-engine which became unmanageable due to the disabling of its "steering gear." Mind you, "steering gear" on a switch-engine!

Whether Mr. Dosch's fondness for automobilizing got the better of him for the moment or not, or the editor thought he was aboard a yacht, we are unable to say, but as any ten-year-old boy knows that nothing connected with a railroad has any sort of steering gear, we can only hope that Mr. Stewart does not lay the blunder to ignorance on the part of the writer. Any one who has followed Mr. Dosch's work would hardly be apt to accuse him of such an unpardonable sin as thinking for a moment that the wheels of a locomotive are guided in any other way than the rails they follow. What he meant was *controlling* gear, but in some manner the wrong word was substituted.

We are always grateful to our readers for calling our attention to any slips of this character which they may happen to discover, for we do not pretend to be infallible, though we are glad to find that only on rare occasions that fault can be found.

And in the November number, in the article on

the Walschaert valve-gear, we made it read that the locomotive "Wm. Mason" was supplied with this gear in the year 1847. It should have read 1874. Charles E. Fisher, of Ann Arbor, Michigan, who kindly loaned us the photograph in question, called our attention to the error in the date. Thanks.

A BRAKEMAN PROTESTS.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

LOOKING over your October number, I noticed the article on "The Fine Art of Running a Freight," by Charles Frederick Carter. It was very interesting reading about the way traffic is handled in the East on the three and four track systems, where the con does not handle any orders and the shack does not have anything to do except to get in the way.

I would like to know if they carry a bunch of car-knockers on the high-flying freight-trains, if the train-detainer does the flagging, and if the shacks are in the habit of setting out cars without setting any brakes, or does the despatcher tend to the brakes also?

I have never done any of that high-toned braking back East where they have a whole clear yard from one end of the division to the other, but I have "broke" on our Western humps, and if we are only trainmen to-day we still do quite a lot of braking. When we are holding a train down a hump, it is a good thing to have us in the way.

I believe that if a brakeman protects his train, looks over the running gear on fifty or sixty cars, and that no broken beams are trying to put a train into the sage-brush or to the bottom of a cañon, he is earning his share of wages.

And in this old land of ours, we are thankful to have one pair of rails to run on, instead of four or five.

I railroaded in the link-and-pin days, and have worked on most of the roads west of Chicago. I have seen railroading in the tropics, and in all of my time I have always had something else to do except hold down the tallow-pot seat.

A BRAKEMAN.

WHO KNOWS "JACK" CONWAY.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

I AM an interested reader of your magazine, and, although I do not know much about railroads, I read every page because my father is a railroad man, and it is in the hope of finding him that I appeal to you. He may be a reader of it, too.

My father's name is John Charles Conway, commonly known as "Jack," and for a number of years he was an engineer on the C., B., and Q., having what I believe is or was called, the Kansas City meat run. He was last heard of at Keithsburg, Illinois.

I was four years old when I saw him last, and I am now twenty. He, of course, has changed in sixteen years, but I can describe him as mother told me. He stood six feet two inches in height and was light complexioned and had blue eyes. He was, I believe, a very heavy man. This is not very definite, but it is the best I can do.

Your magazine has a wide circulation, and surely somebody in this country who knew my father will write and tell me about him. It is the one wish of my life that I find him. He is my father, and I have never heard from him, but I love him dearly and would indeed feel grateful if you could find just a little space in which to print this. Any one knowing anything about him may write to his daughter.

MRS. ELSIE CONWAY TRAPP,
1703 North Madison Avenue, Peoria, Illinois.

SEND YOUR STORY.

UNDER the heading, "Flashes from the Headlight," we are publishing this month, the second batch of original stories which have been sent to us through the courtesy of our readers.

All of them are real bits of humor that have cropped up here and there among the followers of the iron trail which they have been kind enough to take the trouble to contribute to our columns. We desire to thank most sincerely those who have remembered us in this way, and we hope that if any others among the readers of *THE RAILROAD MAN'S MAGAZINE* should happen to run across some good ones that have not already been published, they will mail them to us for our new department.

SELF-PROPELLED MACHINE-SHOP.

THE North Coast Railroad is a new line being built through central and western Washington from Spokane to the Cascades. During the construction there are, of course, a large number of locomotives and cars in regular service which are continually getting further and further away from the base, and, in order to properly maintain this equipment, a traveling machine-shop has been designed.

This shop consists of a specially constructed, very large box car with numerous windows on each side, which encloses the gas-engine for driving the tools and a selection of tools suited for the work to be done. The gas-engine is a twelve horse-power Fairbanks-Morse, and is connected through a friction-clutch to the wheels, so that the car is capable of going from place to place under its own power, and can also do switching to get into the most convenient location.

FIRST TRAIN OVER W. P.

THE first through passenger-train over the Western Pacific, between the coast and Salt Lake City, was a special from San Francisco. It made the run in thirty-six and a half hours, which will be the time for the regular service for thirty to sixty days, when the time probably will be shortened.

Those who have been over the line say that there is marked diversity in the beauties of nature spread out in a lavish way at various points, along the Feather River there being between eighty and

ninety miles of picturesque cañon scenery, and in the Sacramento Valley there is a stretch of two hundred miles as level as a floor running almost at a tangent into Oakland.

TEACHER TOOK IT AWAY.

EDITOR, *THE RAILROAD MAN'S MAGAZINE*:

I AM only a kid, but I love to read your magazine, and love railroads as all my folks are railroaders. I have not missed a number since I began reading your magazine, but the teacher took one away from me because I was reading it in school, but I will always read it if it continues like it is now. Three cheers for *THE RAILROAD MAN'S MAGAZINE*!—D. L. L., Cisco, Texas.

MR. HOFMAN'S NEW NOVEL.

"MARK ENDERBY: ENGINEER," is a new railroad novel by Robert Fulkerson Hoffman. It is a strong and gripping story of mountain railroading in the Southwest. In *Mark Enderby*, Mr. Hoffman has developed a character that combines all that is romantic and strenuous in a railroad man. The story is told with wonderful realism and has a remarkably well-developed plot.

Mr. Hoffman's new work is based on his railroad stories which appeared in *Scribner's Magazine* and *THE RAILROAD MAN'S MAGAZINE*. "Against the Mountain" and "The Fires of Sorrow," which are embodied in this new novel will be remembered by our readers. The book should find a place in every railroad man's home. It is splendidly illustrated in colors, by William Harnden Foster, and is published by A. C. McClurg Company, Chicago. Price, \$1.50.

OUR MOTHER TONGUE!

EDITOR, *THE RAILROAD MAN'S MAGAZINE*:

I WISH to say that *THE RAILROAD MAN'S MAGAZINE* has filled a space that was left open in literature, for a long time—*railroad writing*. In other words, a story or incident told as it was told "down at the roundhouse" in good, clean-cut railroad talk, leaving out that would-be slang.

While railroad men use slang, they use it altogether different to what our would-be railroad writers have it, and, from the first number of *THE RAILROAD MAN'S MAGAZINE* I could detect the true ring of the "language" as quickly as I could the "tone of the bell on the hog."

"WHISTLING BICK,"
Shreveport, Louisiana.

SANTA FE SCHOLARSHIPS.

THE Atchison, Topeka, and Santa Fe Railway has promulgated an order to establish a scholarship in the Armour Institute at Chicago, to be awarded before the beginning of the next scholastic year, in September, to the apprentice of

the system having the best record. Another will be awarded next year. Afterward, should the arrangement work out satisfactorily, one scholarship will be awarded each year. The only conditions attaching to the competition are that the apprentice selected shall have served three and a half years with the road, and be able to pass the entrance examination of the Institute.

GOOD ALL THROUGH.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

I AM a full believer in the idea that "a good thing ought to be boosted." After constantly reading your magazine for more than a year, I pronounce it the best thing that I have ever found in the way of a genuine entertainer. I am a traveling salesman, and, to tell the truth, I would just as soon try to get along without my expense account as my good-all-through RAILROAD MAN'S MAGAZINE. In my opinion, there is only one way in which you could improve upon this particular magazine, and that is, to make it a semi-monthly publication.—H. G. B., Parkersburg, West Virginia.

FROM THE AUTHOR OF McCracken.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your October number, I note a request for the poem, "McCracken." It happen to be the author of it, and take pleasure in transmitting herewith the poem in its entirety.

In "By the Light of the Lantern," page 66, "J. J. M.," of Manila, asks for information concerning the position of "qualified flagman." A qualified flagman is a brakeman who, having passed the required examination, is pronounced capable of performing the duties of a flagman. He retains his position as brakeman, but when an extra flagman is needed, he is called upon to serve in that capacity. He is known as "extra flagman."

In the same department, September number, page 683, "A. W. B.," Wisconsin, asks if there are any locomotives running which require two firemen, to which you reply in the negative. On the Wyoming division of the Lehigh Valley Railroad, there were, and I presume are, a number of auxiliary engines employing two firemen.

LYDIA M. DUNHAM O'NEIL.

McCRACKEN.

WHEN McCracken went a braking, it was ten to one that he

A brakeman solid gold and fourteen karat fine would be.

He looked just like a hero, so proudly did he stand
Upon the swaying box car, with a brake-stick in his hand.

McCracken's hair was neatly brushed, McCracken's face was clean,
And on his clothes a speck of dust was nowhere to be seen.

The over-clothes McCracken wore were neat and bright and blue,

And the slightest glance would tell you that McCracken's shoes were new;

The fit of them was perfect, and he had them neatly laced,
While his shapely hands were in a handsome pair of gloves encased.

He wore a four-in-hand beneath his collar, knotted tight:

He smiled at the conductor, and his teeth were milky white.

And when he wasn't busy with his winning Irish smile,

McCracken whistled gaily—oh, so gaily, all the while.

McCracken's jaunty cap upon his head was firmly set—

McCracken was a brakeman fourteen karat fine, you bet!

But when it came to braking, what McCracken didn't know

Would fill a book two hundred thousand pages long or so.

He didn't know an east-bound train from one that traveled west;

He got flustered in the signals, so at them he merely guessed;

He tried to give the eagle-eye the sign to go ahead,

But it was the back-up signal that he handed out, instead;

They backed into a hand-car, and they put it on the bum;

They asked him why he did it, and McCracken just kept mum.

Then he said he would do better if they'd give him one more chance,

But the handsome Irish brakeman led the crew a lively dance.

They sent him for a gasket, and he brought a coupling-pin,

But McCracken seemed so innocent, to roast him was a sin.

He tried to turn a switch, and wondered what on earth could be

The matter, till his buddy showed him how to use the key.

He thought he was obliged to twist each brake-wheel that he saw;

He didn't know that when he broke a seal, he broke a law.

He didn't mean to do things, but he did them, just the same,

For to blunder was his nature, as McCracken was his name.

To tell the things McCracken did would take a year or two;

'Twere easier, in fact, to tell the things he did not do.

But McCracken reached the limit of ignorance when he tried

To take the derail from the track and throw the thing aside.

And when the engine, in a little fit of spite, broke down,

McCracken just got in the way by tinkering around.

He wouldn't stay where he was put, as all good brakemen ought—
His presence was required at the head-end, so he thought—
At length the eagle-eye got up and plugged him on the mouth.
And when we saw McCracken last, his jaw was drooping south.

When he got in from work that night, his overclothes were torn;
His cap was not so jaunty as it had been in the morn;
His four-in-hand was crooked, and his hair was all awry;
He didn't try to whistle, for his throat and lips were dry.

He made no attempt to smile—the reason wasn't hard to guess,
For his eyes were filled with cinders, and his heart with bitterness.
His gloves, erstwhile so handsome, now were ripped and torn and soiled;
McCracken's sad appearance told of one long day of toil.

He walked into the office and straightway his job resigned,
For McCracken was aweary—yes, in body, soul, and mind.
McCracken went a farming, and willingly I'll bet
Whatever you'll put up on it, that he is farming yet.

We thank Mrs. O'Neil for her interesting letter and the valuable information that it contains, and we also thank her for the words of "McCracken." And we hope that the boys will not fail to read her excellent little story, "The Aerial Mail," published on page 444 in this number of our magazine.



TWO MORE OLD SONGS.

IN THE BAGGAGE-CAR AHEAD.

ON a dark stormy night, as the train rattled on,
All the passengers had gone to bed,
Except one young man with a babe on his arm,
Who sat there with a bowed-down head.

The innocent one commenced crying just then,
As though its poor heart would break.
One angry man said, "Make that child stop its noise,
For you're keeping all of us awake."

"Put it out," said another; "don't keep it in here,
We've paid for our berths and want rest."
But never a word said the man with the child,
As he fondled it close to his breast.

"Where is its mother? Go, take it to her—"
This a lady then softly said.
"I wish that I could," was the man's sad reply,
"But she's dead in the coach ahead."

Every eye filled with tears when his story he told,
Of a wife who was faithful and true,
He told how he's saved up his earnings for years
Just to build up a home for two.

How, when Heaven had sent them this sweet little babe,
Their young happy lives were blessed.
In tears he broke down when he mentioned her name,
And in tears tried to tell them the rest.

Every woman arose to assist with the child;
There were mothers and wives on that train.
And soon was the little one sleeping in peace,
With no thoughts of sorrow and pain.

Next morn at a station he bade all good-by.
"God bless you," he softly said.
Each one had a story to tell in their home
Of the baggage-coach ahead.

While the train rolled onward a husband sat in tears,
Thinking of the happiness of just a few short years,
For baby's face brings pictures of a cherished hope that's dead;
But baby's cries can't wake her in the baggage-coach ahead.



WAYSIDE AMBITION.

I WANT to be a brakeman,
Dog-gone!
Legs hanging over the edge of a flat car,
Train goin' 'bout twenty-five miles an hour,
Kickin' the dog-fennel 'long the track—
That's what a brakeman does.

I want to be a brakeman,
I jing!
Making the boys get off the platform,
Cussin' the drayman if the skids is lost,
Hollerin' "Back her a length!" and engineer has to,
That's a brakeman for ye!

No conductor for me, just a brakeman,
By hen!
Can make a couplin' on the dead run,
Has spring-bottom pants and braid on his clothes,
Carries a lantern at night 'n cap over his ears—
That's a brakeman, I tell ye.

I want to be a brakeman,
Geeminently!
Stands in with agents and operators,
Gits to Peru every night and sees a show,
Knows the numbers of the train, chaws tobacker—
He's a regular one; you bet!

And I want to be head brakeman,
Gollee!
Twistin' 'er hard, smoke rollin' round ye,
Country people stoppin' work to look,
Girls wavin' at yer all the way to Peru;
I'll be one, too, some day!

NEW-SKIN

IN A NEW PACKAGE

Hereafter New-Skin will be sold in a new package which has many features that will make it more attractive than ever.



SANITARY
GLASS ROD



GLASS
BOTTLE

Sanitary Glass Rod. No more stiff or lost brushes. Attached to every cork is a round-end sanitary glass rod. Aseptic, cleanly, ready for use.

Aluminum Screw Cap. Each bottle is tightly sealed with a silver-finished aluminum cap. This prevents evaporation and leakage. Bottle can be carried in the vest pocket or purse.

Packed in Glass. The new package is the most sanitary made. No metal comes in contact with the liquid or wound, as with metal tubes.

New Carton. Instead of the outside tin box, we will use a folding carton,

which is easier to open, lighter, and more convenient in every way.

Remember, New-Skin was the original liquid court plaster. It has been before the public for a long period of years, and has always given satisfaction.



ALUMINUM
SCREW CAP

For all kinds of cuts, scrapes, scratches, and burns, it is anti-septic and healing. For chapped lips, chapped hands, chilblains, corns, etc., it is unsurpassed, forming a tough flexible water-proof film or "new skin" which protects the damaged part against irritation, dirt and infection.

10, 25 and 50 cents per package at all drug-gists

"Paint it with New-Skin and forget it!"



NEW CARTON

NEWSKIN COMPANY
DEP'T 15, BROOKLYN, NEW YORK CITY



Your Wasted Time Turned to Account

Hanging out with the boys on the corner may be harmless enough; there may not be much amiss in being a "good sport;" but this sort of thing will not make your pay envelope any fatter, nor will it boost your position. It's *so* easy putting in all your spare time enjoying yourself—but *every moment so spent will exact a bitter reckoning later on—when it's all too late.*

Make a change NOW—just as thousands of men, just like yourself, have already done. Devote *some* of your wasted time to qualifying yourself for a better position and salary. Don't forget that hours wasted on the corner or in the poolroom are worth thousands of dollars to you if properly applied.

There is an easy way for you, by which *you can* succeed as well as others. Have you enough ambition to find out about it?

First of all, read how some of these men have "made good" in spare time through the help of the International Correspondence Schools. These men were just like you—they liked a good time—they were poorly paid—some of them hadn't much schooling beyond the ability to read and write—some lived thousands of miles away. But the I. C. S. *went to them* and trained them in their own homes and spare time. They "won out" just as *YOU CAN*.

John E. Quigley moved up from section hand to trainman; Frank H. Foote from lineman to superintendent; Charles A. Harmon from night engineer to chief engineer; Victor Haney from bookkeeper to civil engineer; O. H. Wagstaff from night overseer to superintendent at two and a half times his former salary. And so on—ever the story of up, up, up—from "good time" days to good salary and good position days, which, after all, bring the greatest happiness. *You can* be helped in just the same way. If you wish, we will give you the addresses of these men and a thousand others, so you can ask them yourself.



Will Fit You For a Big Position

Simply forget who you are, what you do, where you live, what schooling you have had, how little you get on pay day, or what your age. Just mark the attached coupon opposite the occupation in which you would like to succeed. Then the I. C. S. will remove all obstacles by telling you of the very way by which **you can** become an expert without leaving home or your present position. Marking and mailing the coupon costs you only a postage stamp, and places you under no obligation. The I. C. S. method is the one by which **you can** succeed and this is your opportunity to learn how **you can** succeed.

Do it now. Don't put it off. "Some other time" never comes. Get that lead pencil out of your pocket, mark the coupon and mail it **now**. You're facing a mighty serious life-problem if you only knew it. Are you going to master it, or let it master you?

You can succeed. **You can** join the thousands of successful I. C. S. students who at the rate of 300 a month **VOLUNTARILY** report advancement in salary and position, due wholly to I. C. S. help. 316 heard from during September. **You can** get out of the rut. **You can** win a place in the world. Are you really ambitious enough to find out?

Then do it **NOW**—MARK AND MAIL
THE COUPON.

INTERNATIONAL CORRESPONDENCE SCHOOLS, Box 861, SCRANTON, PA.

Please explain, without further obligation on my part, how I can qualify for the position, trade or profession before which I have marked X.

General Foreman
R. R. Shop Foreman
R. R. Traveling Eng.
R. R. Trav'g Fireman
Locomotive Engineer
Air-Brake Inspector
Air-Brake Repairman
Mechanical Engineer
Mechanical Draftsman
R. R. Construction Eng.
Surveyor
Civil Engineer
Banking

Electrical Engineer
Machine Designer
Electrician
Mining Engineer
Mine Foreman
Foreman Machinist
Chemist
Assayer
Architect
Bookkeeper
Stenographer
Advertising Man
Automobile Running
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Name _____
Employed by _____ R. R. _____
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Street and No. _____
City _____ State _____

2315 \$35.

4083 \$50.

2108 \$25.

2271 \$100.

2113 \$50.

2340 \$2.50

2540 \$8.

2121 \$100.

2184 \$45.

2193 \$25.



2132 \$60.

2317 \$25.

4081 \$16.

4082 \$100.

2110 \$35.

2678 \$750

2126 \$175.

2585 \$9.

2208 \$120

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Is there any gift for man or woman so acceptable, so much to be desired, or so permanently valuable as a really fine diamond?

If you wish to confer upon anyone this most beautiful of Christmas gifts or to have for your own use the very finest grade of Blue White stone in any setting you wish, our system of selling you

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The Neighbor-Maker

SAVAGES built rude bridges so that they might communicate with their neighbors. These have been replaced by triumphs of modern engineering.

Primitive methods of transmitting speech have been succeeded by Bell telephone service, which enables twenty-five million people to bridge the distances that separate them, and speak to each

other as readily as if they stood face to face.

Such a service, efficiently meeting the demands of a busy nation, is only possible with expert operation, proper maintenance of equipment, and centralized management.

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One Policy

One System

Universal Service



"That Coupon Gave Me MY Start"

"It's only a little while ago that I was just where you are now. My work was unpleasant; my pay was small. I had my mother to take care of, and it was tough sledding trying to make ends meet. I hadn't had much schooling. I didn't *know enough* to fill any better job than the one I had.

"One day I saw an advertisement of the American School. It told how other men got better positions and bigger salaries by taking their courses. I didn't see how a correspondence course could benefit me, but as long as it didn't *cost* anything to mark the coupon I thought it was worth investigating at least. I marked the coupon and sent it in on the next mail.

"That was two years ago last April, and now I'm drawing more every week than I used to get in a month."

If YOU want a **better position**, if YOU want to get into **congenial work**, if YOU want a salary that's **worth while**—

Sign the Coupon NOW

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R. R. Man's, 2-19

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\$1,500.00 from 60 Hens in Ten Months on a City Lot 40 Feet Square

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Note the condition of these three months old pullets. These pullets and their ancestors for seven generations have never been allowed to run outside the coops.

PHILO SYSTEM

THE PHILO SYSTEM IS UNLIKE ALL OTHER WAYS OF KEEPING POULTRY

and in many respects just the reverse, accomplishing things in poultry work that have always been considered impossible, and getting unheard-of results that are hard to believe without seeing.

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from selecting the breeders to marketing the product. It tells how to get eggs that will hatch, how to hatch nearly every egg and how to raise nearly all the chicks hatched. It gives complete plans in detail how to make everything necessary to run the business and at less than half the cost required to handle the poultry business in any other manner.

TWO-POUND BROILERS IN EIGHT WEEKS

are raised in a space of less than a square foot to the broiler, and the broilers are of the very best quality, bringing here 5 cents a pound above the highest market price.

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In a space of two square feet for each bird. No green cut bone of any description is fed, and the food used is inexpensive as compared with food others are using.

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One of the secrets of success is to save all the chickens that are fully developed at hatching time, whether they can crack the shell or not. It is a simple trick, and believed to be the secret of the ancient Egyptians and Chinese which enabled them to sell the chicks at 10 cents a dozen.

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TESTIMONIALS

My Dear Mr. Philo:—

Valley Falls, N. Y., Oct. 1, 1910.

After another year's work with your System of Poultry Keeping (making three years in all) I am thoroughly convinced of its practicability. I raised all my chicks in your Brooder-Coops containing your Fireless Brooders, and kept them there until they were nearly matured, decreasing the number in each coop, however, as they grew in size. Those who have visited my plant have been unanimous in their praise of my birds raised by this System.

Sincerely yours, (Rev.) E. B. Templar.

Mr. E. R. Philo, Elmira, N. Y.

Elmira, N. Y., Oct. 20, 1909.

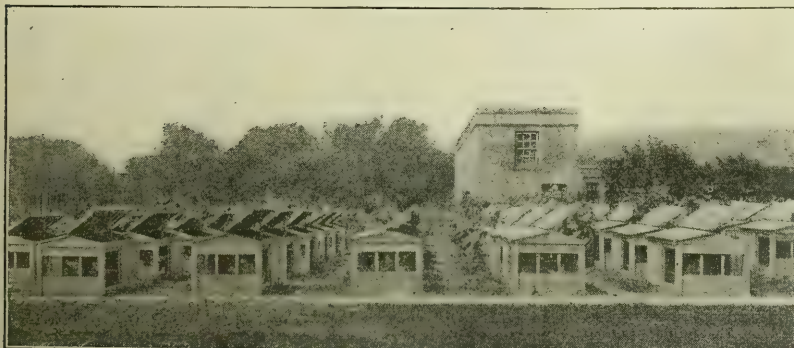
Dear Sir:—No doubt you will be interested to learn of our success in keeping poultry by the Philo System. Our first year's work is now nearly completed. It has given us an income of over \$500.00 from six pedigree hens and one cockerel. Had we understood the work as well as we now do after a year's experience, we could easily have made over \$1000.00 from the six hens. In addition to the profits from the sale of pedigree chicks we have cleared over \$960.00, running our Hatchery plant, consisting of 56 Cycle Hatchers. We are pleased with the results, and expect to do better the coming year. With best wishes, we are Very truly yours, (Mrs.) C. P. Goodrich.

Mr. E. R. Philo, Elmira, N. Y.

South Britain, Conn., April 19, 1909.

Dear Sir:—I have followed your System as close as I could; the result is a complete success. If there can be any improvement on nature, your brooder is it. The first experience I had with your System was last December. I hatched 17 chicks under two hens, put them as soon as hatched in one of your brooders out of doors, and at the age of three months I sold them at 35c. a pound. They then averaged 2½ lbs. each, and the man I sold them to said they were the finest he ever saw, and he wants all I can spare this season.

Yours truly, A. E. Nelson.

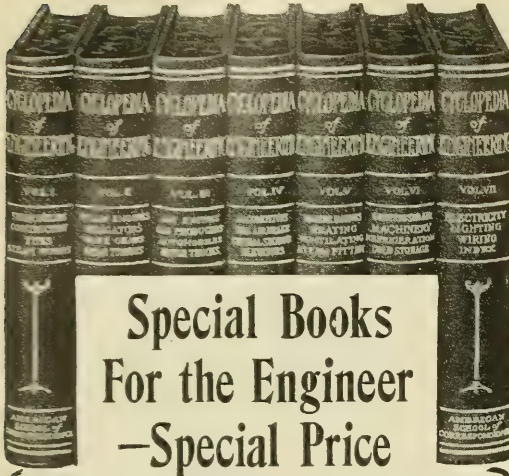


Photograph Showing a Portion of the Philo National Poultry Institute Poultry Plant, Where There Are Now Over 5,000 Pedigree White Orpingtons on Less Than a Half Acre of Land.

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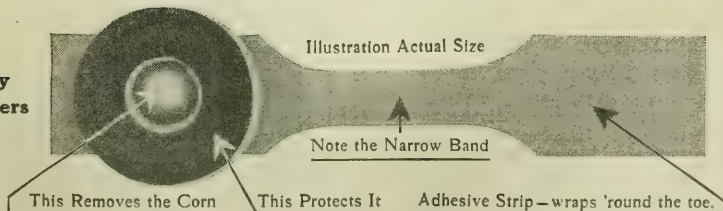
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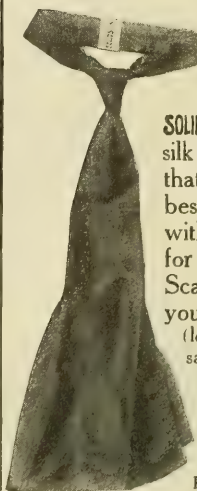
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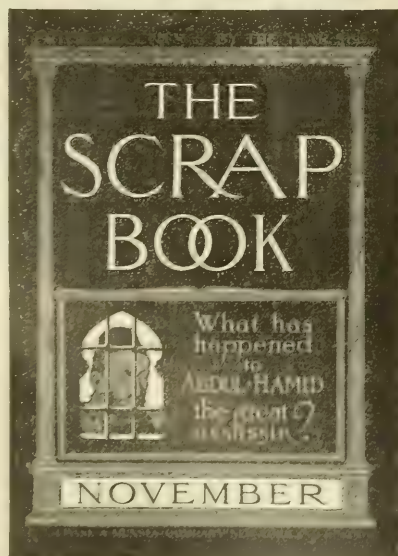
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[Reference: The Bank of Leipsic
Capital: \$1,000,000.00]

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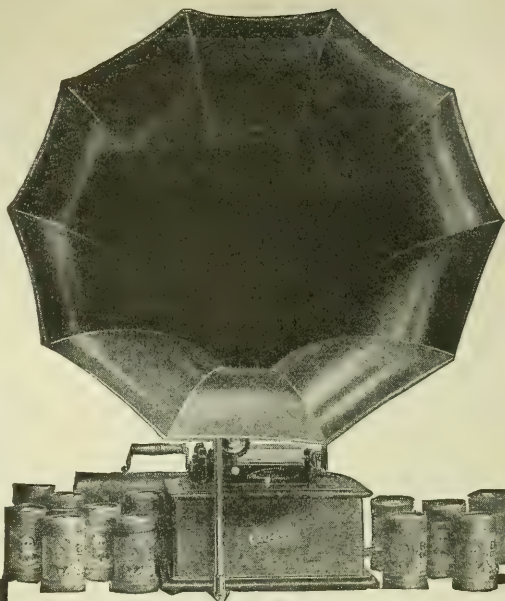
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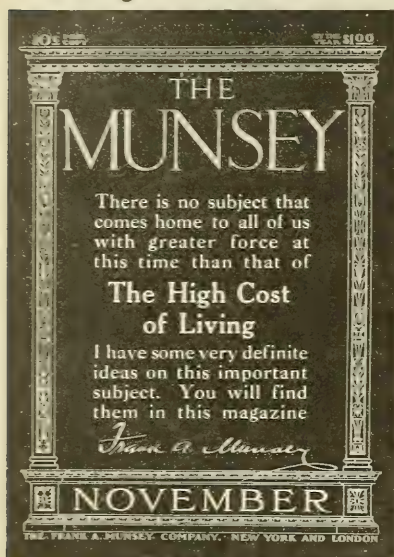
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BY FRANK A. MUNSEY

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This is the most widely circulated financial review in America. Investors all over the country follow the movements of the great money markets through Munsey's Magazine. Questions affecting securities are answered each month without charge.

Munsey's Magazine *for* November

IN CASE OF WAR:

Rear-Admiral Robley D. Evans, in "Is the United States Prepared for War?" says there is not enough powder in the country to carry on more than a few hours of stiff cannonading. And he backs it all up with some startling figures.

THE FALL ELECTIONS:

"Democratic Presidential Possibilities," by Willis J. Abbot, twice manager of the Democratic National Press Bureau, tells about some of the big men who, as a result of this month's elections, may be called upon to carry Democracy's standard.

THE FOOTBALL SEASON:

Ralph D. Paine tells us why \$300 will not buy two good seats at the annual gridiron struggle between Yale and Harvard.

A REAL KING:

Isaac N. Ford, London Correspondent of the *New York Tribune*, takes us back of the British throne and gives us a close-range view of "King George V, the First Imperialist King of England."

WHAT WOMEN HAVE ACCOMPLISHED WITHOUT THE BALLOT

A record of the achievements of the gentler sex, written by the executive secretary to Mayor Gaynor of New York.

FAMOUS AFFINITIES OF HISTORY

The most-talked-of magazine feature of recent years. This month the story of Marie Antoinette and Count Fersen.

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MUNSEY'S MAGAZINE

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Frontispiece

Portrait of King George V

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George V, the First Imperialist King of England . . . Isaac N. Ford

Is the United States Prepared for War? . . . Rear-Admiral Robley D. Evans

Democratic Presidential Possibilities . . . Willis J. Abbot

What Women Have Accomplished Without the . . . William Brown Meloney

Ballot . . . Frank A. Munsey

The High Cost of Living and Its Relation to the . . . Ralph D. Paine

Tariff . . . Lyndon Orr

The Greatest Show on Earth . . . Marie Antoinette and Count Fersen—*with four portraits.*

Famous Affinities of History . . . Frank A. Munsey

A Word About the Business and Financial Outlook . . . James Oliver Curwood

Serial Story

The Honor of the Big Snows . . . Owen Oliver

Short Stories

The Two Skippers . . . Katharine Eggleston

The Bachelors' Dinner . . . G. W. Ogden

The Man from Omaha . . . Helen Green

An Episode in Black-Face . . . Montague Glass

The Trail of the Silk . . . Edward Boltwood

Foghorn Fernando . . . Edith Livingston Smith

The Suds of Destiny . . . Ralph Bergengren

Of the Old School . . . Bannister Merwin

A Needle in a Haystack . . . Lewis Edward Collings

Our Suburban Home . . . Carlyle Smith

The Calling of Reginald . . . Carlyle Smith

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Light Verse
The Stage

Financial Department
Stories

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\$500,000 to change hands

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\$1685 in 73 days, received by Rasp (an agent).

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\$500,000.00 worth will be sold easily this season. 75¢

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M. Juell



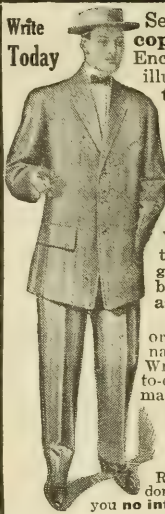
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\$1.00 DOWN

Puts into your home any Table worth from \$6 to \$15. \$2 a month pays balance. Higher priced Tables on correspondingly easy terms. We supply all cues, balls, etc., free.

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CHICAGO

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Filigree**
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THE RAILROAD MAN'S MAGAZINE



JANUARY



Fashion's Favorite

There is one thing that is always fashion's first favorite, and that is beauty. Style of dress, of coiffure, of head-gear, and so on, may change with every month or season, as whim, fancy, or milliners' decree may dictate, but beauty of skin and complexion is of the fashions that remain permanent from age to age. This explains the fact of the enduring popularity of

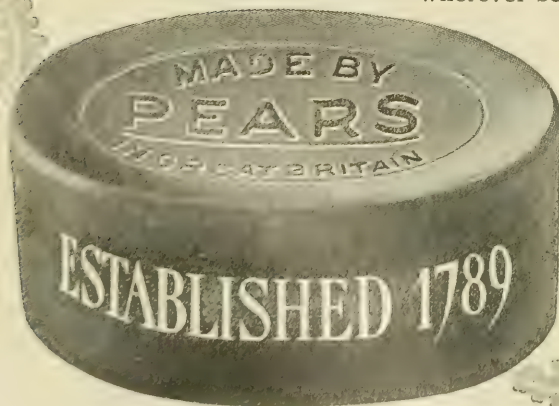
Pears' Soap

which, being all pure soap, possessing unique emollient properties, that preserve, refine, and improve the beauty of the skin and complexion, never ceases to be the leading soap wherever beauty holds her enchanting sway.

DELICACY—The delicacy and daintiness of the skin of youth are preserved by the daily use of PEARs.

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Sammarco

Battistini

Ruffo

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de Gogorza, the greatest Spanish baritone

Renaud, the greatest French baritone

Schumann-Heink, the greatest of all contraltos

Homer, the greatest American contralto

Gerville-Réache, the greatest French contralto

Melba, the greatest of all sopranos

Tetrazzini, the greatest Italian soprano

Eames

Farrar

} the greatest American sopranos

Calvé, the greatest French soprano

Gadski, the greatest German soprano

Sembrich, the greatest Polish soprano

Michailowa, the greatest Russian soprano

Journet

Plançon

} the greatest French bassos

Witherspoon, the greatest American bass

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And be sure to hear the

Victor-Victrola



New Victor Records are on sale at all dealers on the 28th of each month

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Pack mules carry GOLD MEDAL FLOUR across the Brazilian Andes. It is shipped to Panama and the Central American States.

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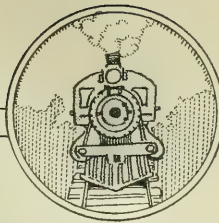
A vast multitude of bread eaters all over the world—to the far ends of the earth—appreciate the superior quality of GOLD MEDAL FLOUR, and demand it, even at the cost of great inconvenience and tedious transportation.

But You can get GOLD MEDAL FLOUR at the Grocers just around the Corner.

GOLD MEDAL FLOUR

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THE RAILROAD MAN'S MAGAZINE

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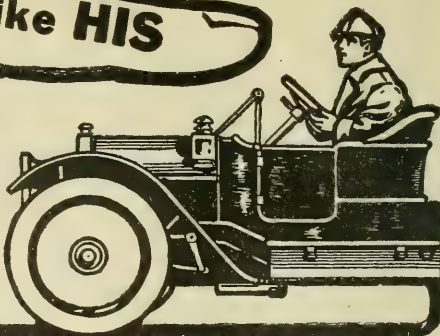
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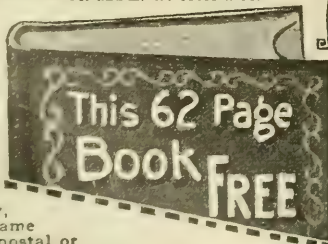
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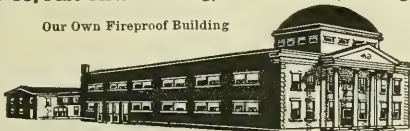
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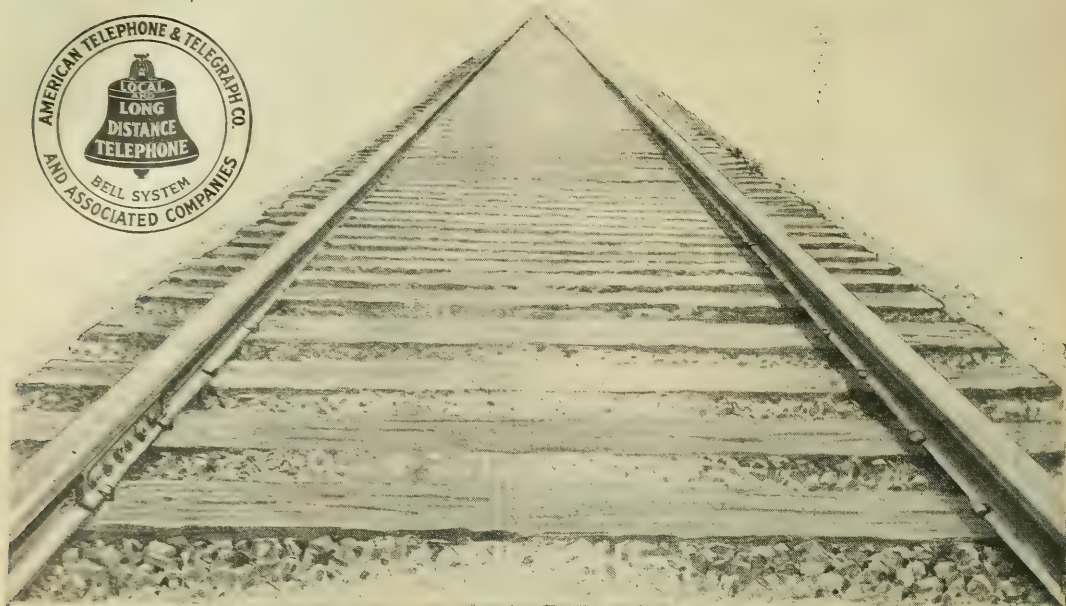
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THE RAILROAD MAN'S MAGAZINE

Vol. XIII.


JANUARY, 1911.

No. 4.

The Funny Side of Railroading.

BY WALTER GARDNER SEAVER.

A Brace of Boes That Were Watered Out—Why Bob Rogers Drifted Far
Away from Texas—How John Kept Losing
His Tail.

 HOSE turn is it to speil
to-day?"
"Dempsey's."
"You've got the
highball, Dempsey.
Hook her up and
pull her wide open. You've got nothing
against you."

"On the Burlington lines out of old
St. Joe, some funny things happened,"
said Dempsey.

"Dave Winton was superintendent of
the Kansas City, St. Joe, and Council
Bluffs then, and Mike Hohl was chief
despatcher. There was a gang of toughs
in the town known as the Dillon gang.
They used to run amuck whenever the
notion took them. For a time there was
hardly a pay-day that the Dillons didn't
lay for some of the railroad boys, and
Winton almost invariably had a crowd
on the carpet in consequence.

"The Dillon crowd was feared by
everybody. It used to be a saying that
when the Dillons broke loose the police
force went to investigating vacant lots
where the weeds grew thick and tall so
that the Dillons wouldn't come against
them.

"For some reason Winton always came
down hard on the railroaders that mixed
it up with the Dillon crowd, and more

than one poor devil was let out without a
clearance for no other reason than that he
had been in a scrap with the Dillon outfit.



"AS IF HE HAD BEEN SHOT FROM A CATAPULT."

"P. H. Houlahan was with the Hannibal and St. Joe, being trainmaster at Brookfield. Whenever any of the Hannibal boys got mixed up with the Dillons, they were up on the carpet, of course; but Houlahan always stood by the railroaders and, so far as I know, no Hannibal man was ever let out or even laid off for ten days because he mixed it up with that crowd.

"But what I want to tell about is a wreck that occurred in the Narrows between St. Joe and Atchison. Winton was a portly man, and was usually inclined to be rather dignified.

"He was seated in an armchair beside the open side door of the way car with his feet elevated and resting against the jamb of the door and sound asleep.

"Suddenly he was shot out of the door and went tumbling down the bank among the ragweed which had grown to a height of five or six feet. Before he was fairly awakened, he had managed to get his feet and legs so tangled up in the weeds that every time he attempted to rise he would get entangled worse and worse.

"When the boys saw that he was not hurt they could not refrain from giving vent to their hilarity, and it was some time before they could turn their attention to the condition of the wreck. When Winton finally got loose and came up the bank with his face and clothes all yellow from the bloom of the ragweed, they suddenly became very serious. When he finally got to the top of the bank, one and all were very earnestly inspecting the wreckage.

"Whether it was because of a broken or defective flange on one of the wheels or for some other reason, the trailing truck under a box car failed to follow the lead of the front one and climbed the frog. About half the train had followed the engine onto the siding, but the rest of the cars were distributed over the landscape with the exception of the way-car and two cars ahead of it, which did not leave the rails. The sudden jerk as the cars left the iron had shot Winton through the open door as if he had been hurled from a catapult.

"What have we struck?" he yelled as he glided into the atmosphere.

"Every man in the crew got thirty days. Winton said it was because we laughed at him.

"Sam Wadsworth served through the Civil War. He was a captain in the Union

army, and was wounded by a Minie-ball striking him in the head at the battle of White River, Arkansas. He was wounded on the morning of July 4, and for a time his



"THERE WAS HARDLY A PAY-DAY THAT THE—
RAILROAD—

life was despaired of. However, he got well—and the Fourth of July was always a great day for him.

"It was Sam's day to howl. Not even the President of the United States could induce him to do a tap of work on that day. No matter where he was, he did not fail to have a liberal supply of fireworks. Oh, he made a noise, all right! Christmas and New Year's were nothing to him when compared to the Fourth of July.

"After the war, Sam went into the service of the Hannibal and St. Joe, and for a time ran a freight between Brookfield and Quincy. Afterward he was given a passenger run between Quincy and St. Joseph. This was before the line was opened from Cameron to Kansas City.

"One day, just as Sam was leaving the house to go to the yard to take out his train to Quincy, a couple of tramps asked if they could have something to eat. They claimed to have been in the war, and since that time had been drifting about the country seeking employment.

"As there were hundreds of men in the



—DILLONS DIDN'T LAY FOR SOME OF THE
—BOYS."

same predicament at that time, nothing was thought about it. Any man who claimed to be an ex-soldier did not have to ask Sam Wadsworth the second time for assistance. But these two men did not know that, and the elder of the two began a hard-luck story that his comrade had lost his speech owing to a wound in the throat, and the scar of a gun-shot wound on the neck was corroboration.

"Sam did not care anything about this. The fact that they were ex-soldiers was sufficient. He took the men to the house and told his wife to give them food. Then he hustled off to the yard.

"Will Craig, his brother-in-law, though only a youth at the time, was braking ahead for him, while his brother, Dan Craig, was a little fellow and was at the house when the tramps were seated at the table.

"While they were eating, and when nearly through, the east-bound freight from St. Joseph pulled in. This was the train that Wad was to take out, and there was upward of an hour yet to be used in the yard before she pulled out.

"The tramps did not know this, however, and as the train whirled by the house the dumb man shouted:

"Hully gee, Tom! We must make that train!"

"They rushed out and down into the yard. This was evidently a ruse to get away before they could be asked to cut some stove-wood in payment for the meal, a course that was customary among Missouri matrons at that time.

"Dan Craig thought that the sudden recovery of speech by the dumb man was nothing short of a miracle. Thinking that Sam would be pleased to hear of the good luck that had come to the tramp soldier, he hastened to the depot, where he found Wad, book in hand, slowly pacing along the train, entering the car initials and numbers.

"When Wad heard the story, he simply said, 'Humph!' The miraculous feature of the matter did not strike him as forcibly as it had Dan. He told the boy that it was all right, and that he was glad to hear it, and went on with his work.

"Soon after, he spotted his table-guests sneaking along through the yard, and called Will Craig's attention to them.

"Let them stow away," said Wad, "and when we get out on the road I will have some fun with them."

"They kept an eye on the two men and, just as the train was about to pull out, saw them climb in the end window of a car loaded with lumber. Will soon spotted the place where they had hid themselves.

"This train stopped only at Macon, Shelbina, and Palmyra Junction. At Macon, Craig saw a thin wisp of smoke curling out of the end window of the tramps' car. Standing astride the two cars, he called out:

"Sam, there's a fire in this car of lumber. Pass up a few buckets of water."

"As the water was passed up, he deluged the inside of the car—one bucket to the right, the next to the left, and the third to the center. The tramps caught every drop, for the space where they were stowed away was scarcely large enough to hold two men.

"The third bucketful was too much, and one of them called out:

"Cheese it, cully. We'll come out!"

"They came out. A more wobegone, forlorn pair of hoboes had never been seen. Both were thoroughly soaked.

"Holy smoke!" said Craig. "Don't you fellows know better than to stow away in such a place? That lumber is liable to

shift at any jerk of the engine, and flatten you out as thin as a pancake. Where are you going?'

"They said that they were going to Chicago, and told their hard-luck story. Craig appeared to be much impressed and said:

"I only go as far as Quincy, but so far as I am concerned, you are welcome to ride. Only you must come out and ride on top, but be careful that the con don't see you. When the engineer shuts her off and squeals for brakes you shin down the ladder on the side opposite to the station and hit the grit. Get into the weeds and lie low until the train starts again; then get back on top.'

"It did not occur to either of the tramps that the con, from his lookout-seat in the cupola, could see over the top of the train. Craig made them go forward to the car right back of the engine. In those days of balloon stacks, engines threw dense volumes of black smoke, while a steady shower of cinders was sure to rain over the forward cars.

"Wet and shivering, the two hoboes hung to the running-board, swallowed smoke, and chewed cinders without a murmur, while Craig, who was riding in the cab, and Wad, who was watching them from the cupola, had a *matinée* performance which they never forgot.

"At Shelbina, the depot was in the center of the town, with a small park on either side, and there were no weeds, so the hoboes had to get down in full view of the stores and business houses that lined the opposite side of the square.

"They were game, however. When the train started, they made a run for the side-ladders of the way-car. Somebody yelled at them, and they scrambled all the faster.

"The engineer pulled the throttle wide open, and by the time the men grabbed the hand-holds the train was going at a pretty good clip. They had all they wanted to do hanging on, but they managed to pull themselves up, and flopped on the roof, grabbing the running-board for dear life.

"At Palmyra Junction the train stopped a moment for orders. When it started, the tramps were kept moving pretty lively to avoid being ditched. Shortly after leaving Palmyra Junction, the road strikes the south bank of the South Fabius River, and runs along this to a point near its junction with the Mississippi River not far from the west end of the bridge. As the train swung around a curve, a link on the third car from the engine broke, and the engine and the

three cars jumped ahead as though shot out of a gun.

"The tramps were shot off. They clutched frantically at the smooth tin roof, but, failing to secure any hold, were gracefully dumped into the mud at the edge of the creek. The Fabius had just recovered from one of its periodical attacks of high water, and a bed of mud about the consistency of mush and as black as tar bordered the stream. Into this soft bed the two plumped clear up to their shoulders. Craig looked back, and the fireman leaned from the gangway in an effort to see what had become of them. They could not stop. It was up to the front end now to keep away from the rest of the train.

"The middle and rear brakeman had hustled out on top as soon as they felt the jolt that told them the train had parted, and were busy setting brakes to hold her down the hill; but Wad had kept his eye on them, and, as the way-car passed, he saw them scrambling out of the mud.

"They knew enough to wave us good-by," said Wad.

"Will Craig, too, had a heart in him as big as an ox. When he was in the yards at Argentine, Kansas, there was more than one railroader out of a job who had reason to remember him. Twenty years ago, there was more or less drifting about of railroaders, especially switchmen and brakemen. Traffic would fall off, the number of trains would be reduced, and, as a consequence, a number of men would be let out or laid off until business picked up again.

"A number of unmarried men would take advantage of this to change their location. They had their clearances, which were sufficient to enable them to get over any road, and also to get in line for work whenever opportunity offered.

"Once a brakeman named Bob Rogers struck Argentine dead broke and pretty well all in. He had traveled around in search of employment until his funds were exhausted. He ran against Craig, who saw that he had a boarding-place and was made comfortable. About ten days afterward, he caught a run on the Missouri Pacific out of Armourdale.

"I had drifted down into Texas,' he said to Craig, 'as I had always been anxious to see that country, and as there was considerable new mileage under way, I thought the outlook for getting set up there was much better than back here in the East. I

got a run on the Espee out of San Antonio, and had 'em coming nicely until a little more than a month ago. Then I began to get into it proper.

"We pulled out, one morning, with a lot of empty stock-cars bound west. The day was fine—just after a rain—and I was sitting on a brake-wheel, two or three cars back of the engine, taking it easy. We were near Hondo, and, as we were not scheduled for any stop east of Uvalde, where we had a meeting-point, I was taking considerable enjoyment out of the ride.

"Suddenly I heard the engineer squealing for live stock, but as we had that every two or three miles, I was not paying much attention. I knew that if that old hog mixed it up with any steers, the steers would get the worst of it.

"Suddenly I shot from my seat, and sailed gracefully through the air, landing head first in some A1, soft, sticky mud at the bottom of a little arroyo. The cars were strung out all over the landscape, and the old hog, which I had thought immune from any cattle ailment, lay on her side in the ditch, groaning her life out.

"Her crew had promptly gone overboard, and they, too, had landed in the soft mud in the arroyo, but, unlike me, they lit feet first and came up unhurt. The way-car and, perhaps, a third of the train had not left the rails. The con and the middle and rear brakeman came hustling ahead to see about the dead and wounded.

"I had got straightened up and, with the engineer and fireman, they proceeded to indulge in an outburst of glee every time I moved or attempted to speak. I imagine that I must have been a sight, and I am dead certain that if I had been in their place, and some other poor devil in my shoes, I would have laughed, too.

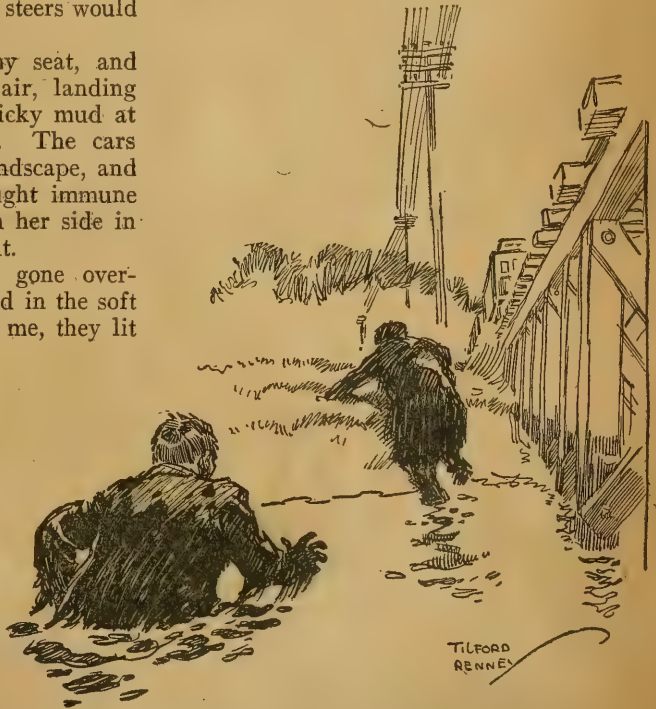
"Well, they got out flags, and the con proceeded to toddle off down the track to Hondo to report the wreck, while the rest of us proceeded to make an investigation as to the cause of our ground and lofty tumbling.

"A bunch of steers had been on the right-of-way, and all had been scared off by the whistle. The engineer had just pulled her wide open, and was hitting 'em up

again, when one stupid steer took a notion that he could outrun that hog, and so swung onto the track again.

"The steer was galloping down the track, right between the rails, in that graceful way that a Texas steer moves, until he came to the trestle that spanned the little arroyo, when down goes his forelegs between two ties.

"As soon as he saw the steer swing onto the track, Hank shut her off and slammed on the air, but not quick enough to avoid hitting the steer. The old hog carved that steer into hamburger steak, but in doing so lifted her trucks, climbed the rail, and turned over easily on her side.



"THE FABIVS HAD JUST RECOVERED FROM ONE OF ITS PERIODICAL ATTACKS OF HIGH WATER."

"Well, we got out of that mess all right, and two days afterward we were going east with a heavy train of cattle. There was a little, short spur-track just outside of San Antonio, just about long enough to hold two box-cars. Hank had 'em coming right along in fine style, when we went plump into that spur-track.

"Somebody had either left the switch open, or unlocked, and it had sprung. At any rate, we headed in there, going at a

thirty-mile-an-hour clip. The engine struck the bank used as a bumper. I was standing in the gangway, and when she stopped and turned over I just kept on going, plowing up the Texas soil with my right shoulder for something less than a half-mile.

"Hank was caught when the deck-plate doubled up. His right was badly jammed. The fireman had attempted to get off, but was caught by the tank and injured. This should have been enough for me, but I only laid off one trip, and then went out on my run.

"Everything went smoothly, we were clipping along near Hondo, and I was thinking of the funny picture I must have presented as I climbed out of the mud, when I suddenly got right off that brakewheel and took another trip through the air.

"When I came to my senses and began to take stock, I found myself sitting astride a side of dressed beef down in that same arroyo, while carefully turned upside down over me, as if to preserve me from accident, was a forty-ton gondola, with the ends resting on either bank.

"Luckily, the gondola was empty when she turned turtle over me, and I managed to crawl out unhurt.

"Investigation showed that a truck had jumped from under a refrigerator-car loaded with dressed beef, and it proceeded to strew the rest of the train over the Texas prairie. When I got out, the middle shack was sitting on the side of an overturned box-car, singing in a thin, strained tenor something about "Sally in Our Alley." He wasn't nutty. It was just his optimistic way of looking at things.

"It was the engineer this time who toddled on down to Hondo to report the accident, while the fireman and I flagged the wreck.

"When the wreck-train came up, I left them to manipulate affairs and paddled on down to Hondo myself. I got back to Santone on the first train, and didn't lose any time in drawing my time and turning in my keys.

"I thought that when I got pitched off a train three times inside of a week, it was a pretty clear hint to me that I wasn't wanted on the Espee, so I hooked her down in the corner, gave her a full throttle, and hit the track on my way north."

"Sam Wadsworth once came into the Hannibal yard at St. Joe with a through train of fast freight from Quincy. No cars had been picked up or set out along the line. Among others was a car-load of dry-goods cases. Wad had received this car at Brookfield sealed with the Chicago seal.

"For some reason, there was a particular hurry on the part of the consignee for the contents of this particular car; so it had hardly been set out on the siding than a lot of teams were on hand to unload it.

"As luck would have it, the car was standing almost opposite the dog-house. The Hannibal and St. Joseph depot at that time was at the corner of Eighth and Olive Streets, and the roundhouse was about four blocks far-



"SOMETHING ABOUT 'SALLY IN OUR ALLEY.'"



"JUST HOW THAT DOG KNEW A RAILROADER WAS A PUZZLE."

ther south—just below what would be Mitchell Avenue, if that street had been opened across the yards.

"Consequently, the throat of the yard was just east of the roundhouse, lying between it and Eighth Street, and just below Mitchell Avenue. So the doghouse, which was an old box-car that had lost its trucks, stood almost on the south line of Mitchell Avenue and not far from the roundhouse.

"When the car was opened, the men were startled to hear the whine of a dog. A moment later the Mr. Dog came limping out from among those cases, and his left hind leg was pretty lame. He was very thin and, as Craig said, he had to lean up against the side of the doghouse when he wanted to stand up.

"When the dog was lifted out and set upon the ground, he at once singled out Craig as the most likely one of the crowd to yield to canine blandishments. Craig took him into the doghouse, shared his lunch with him, and then, having gained the animal's confidence, the gang crowded around to examine into his injuries.

"It was found that the dog's leg was broken, probably by reason of having been jammed between two of the cases.

"The broken limb was washed, the bone set, and splints made from an old cigar-box were applied, and the whole bandaged with an old, discarded red flag.

"He was certainly about the most disreputable-looking dog that ever came down the pike. He seemed to be, as far as blood was concerned, a mixture of Irish setter, mastiff, yellow hound, and coach dog. His left ear drooped sorrowfully and was about half gone, apparently having been chewed off in a fight.

"His right ear was worn cocked up as though he was determined to hear all that was going on. His face and nose were white with the exception of a black patch that surrounded his left eye, giving him the appearance, at a little distance, of having had that optic effectually blackened at some time.

"There was not much hair on his head, which was covered with scars. His tail at one time had been broken, and the latter half of it hung at an angle of about forty-five degrees from the upper half. His body, too, was covered with scars.

"He had originally been spotted with three colors—black, tan, and white.

"He was the living exemplification of hard luck.

"He at once attached himself to the doghouse. Craig was his particular protégé. Craig could drop his coat and lunch-kettle anywhere in the yard in sight of that dog, and then—let any one but Craig touch it if they dared!

"The boys dubbed him John, and he answered the name readily. He constituted himself the guardian of that doghouse, and any railroad man, no matter if a stranger, whether clad in greasy overalls and blouse or wearing his glad rags, who showed up at the doghouse was all right with John.

"Any one not a railroader, however, was kept at bay until some of the railroaders appeared.

"Just how that dog knew a railroader was a puzzle, but he did, and he never made a mistake. He had one bad habit which none of the boys could break him of. He would go to sleep under a car. One day a string of boxes were kicked in on a track on which some empties were standing. John was asleep under one of these empties. The tip of his tail lay upon the rail. When the boxes were kicked in they drove the empties a few feet ahead, and off went four inches of John's caudal adornment.

"John raised his voice in protest, and the boys came running from every direction. The dog was running in a circle, howling and snapping.

"When the boys did finally get him quieted down, they tenderly washed the bloody stump, placed a bunch of oily waste from the dope bucket over it by way of salve, and bound it with scraps torn from an old shirt. In due time the wound healed up, and the boys thought it would be a lesson that John would not forget.

"But John was perverse and obstinate. No place was so good for sleeping purposes as the center of the track under a car. It had not been more than two months since the first amputation until the operation was

repeated. This time a bigger slice went. The tail was now cut off almost to the broken joint, leaving only about an inch, so that it gave him the appearance of having the tip end of his tail hooked down to catch something.

"One would naturally think that John would learn by experience, and keep away from the cars. But no. In less than three months, he had undergone another amputation in the same manner. This time the remorseless wheels left him only about two inches of tail.

"After the wound had healed, he would wag that stump more vigorously than he had ever before wagged his whole tail, and the boys finally decided—and they came to believe it firmly—that John did not like his hooked appendage, and had deliberately set about its amputation. It was only by reason of his deficiency in gaging distance that he had to take three whacks at it.

"Be that as it may, John exercised more discretion, thereafter, in his choice of sleeping-places. When he felt inclined for a nap, he would select the shade of a box-car, but invariably outside the rails.

"John was a fixture in the Hannibal yard for a number of years, and finally met death gallantly. Craig had swung up into the gangway of a passing switch-engine. John attempted to follow him. John had jumped off and on moving switch-engines scores of times before. This time he miscalculated his jump, poor fellow, and landed across the rail.

"The tender-wheels passed over him.

"John was buried on the bank of Liniment Creek, close to the junction of Eighth Street and Mitchell Avenue. The boys thought he would be allowed to sleep there undisturbed, but when the Union Depot was built and the sewer took the place of the old bed of Liniment Creek, John's bones were disinterred by the graders and carted away."

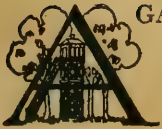




THE DEATH TIDE.

BY ROBERT T. CREEL.

The Particular Revenge That Was Meted Out to Legs Brown, and How It Ended.



GAIN there was quiet on the hillside. The construction-crew was gone, leaving the long gash where ran the rails of the newly completed road as the only memento of their presence. Venturesome chipmunks ran hither and thither along the ties, volubly chattering their impressions of the phenomena to whoever would listen.

The woodland creatures had resumed their normal lives; that is, most of them had. Around a sarvas-berry thicket fluttered a pair of wild canaries chirping distressfully, evidently fearing for the safety of their nest. Something unusual was concealed in the bushes.

Presently, following a violent agitation of the leaves on one side, a large foot appeared, upheld by a long, hairy shank, around which swarmed a cloud of mosquitoes. After waying uncertainly for a moment, the foot was drawn back and there issued forth an individual, red of visage, with blue eyes that laughed, and a figure that was scarcely more rotund than a walking-stick. The birds need not have feared.

It was Legs Brown—he of the Sandville incident and the Melrose wreck, wherein he had pursued the wreckers on ostrich-back, and had caught them. Now he was engaged in secret service for the company. He hoped to stop the depredations of the Indians who resented the encroachment of the railroad on their lands.

Below him was the village of the red

man. There were a few neat houses here and there, but the greater number of dwellings were dirty gray teepees, surrounded by a profusion of soiled children and yelping dogs. The primitive American is not noted for his industry. Given enough to eat and drink, he is never relentless in the pursuit of higher culture.

Out on the bay, a slight breeze rippled the waves and gently rocked the scattered canoes in which a few somnolent Indians were fishing.

The ex-brakeman, yawning and stretching himself, shouldered his rifle and moved stealthily into the underbrush. An ordinary person might have walked directly into the village, but Brown was a detective, and had his own conception of the methods followed by gentlemen in that profession.

"This seems to be a hos-tile country, all right," he remarked, stopping to chastise a predatory ant who had attacked his nether limb. "Even the bugs wanta chew off'n me. But, on, Stanley, on! The night approacheth."

A few steps farther, however, he halted again, his breath coming hurriedly, with a strange tightening of the scalp that caused his hair to bristle. From somewhere at his right came a plaintive voice:

"No, no, Johnny, don't make me go on. Don't. It hurts when I talk about it. Leave th' ol' man alone. I ain't never done nothin' to you all."

Then came another voice, low, yet threatening:

"Bill, who killed Pietro?"

"Yah, who did?" snarled the first speaker, a note of defiance in his tone. "Me! Choked him till his eyes stuck out. He had it comin', Johnny, he did. But he ain't satisfied with that. He ha'nts me! Him an' his crowd o' hell-hounds won't let th' ol' man sleep at night. Why, nobody cud sleep with a whole roomful of 'em gogglin' an' rattlin' their jaws. I cud stand everything else, if they'd stop rattlin' their jaws!"

Brown, moving softly through the thicket, found an old tumbledown shack from which came the voices. No longer caring to play the rôle of eavesdropper, he thrust open the door with his foot, and peered in.

Of the two occupants, one was an apparently half-witted old man, in a frenzy of terror at his own recital. The other was a young Indian, beady-eyed and brutal-featured, with long, coarse hair that served to lubricate his coat-collar. At the interruption he seized his shotgun and covered the intruder before Brown had accustomed his eyes to the half light.

"Git out!" he commanded laconically.

"How d'ye do?" replied Brown, grinning broadly.

"You no go, I shoot."

"You seem to be a man of infinite jest, Horatio, as the feller says. But, say, kid, put 'er up. I feel like I'm going to climb you if you don't, an' you'll git all mussed."

Gazing steadfastly at the other, he advanced until the point of the gun was almost touching him.

"For the last time—put up that gun!"

The Indian returned the look, his own eyes gleaming hate. Then his grip slowly relaxed, and the weapon slid to the floor, its owner cowed by a superior will.

"Havin' a little vaudeville all by yourself, I see. By gosh, it takes a low-down Siwash to get any fun out of torturin' a poor old lunatic. You drive out o' here, and don't come back, or you'll git cleaned."

The Indian sullenly obeyed.

Turning to the old man, Brown said: "If that animile comes pesticatin' around here any more, Uncle Noahy, let me know. I'll be down at the camp a few days."

"Yes, suh—yes, suh. Much obleeged," mumbled the patriarch.

"Don't know but what Johnny'll git singed, anyways, ef he keeps monkeyin' with that there giant powder. Blowed up! He, he! Yes, suh, blowed up!"

"What's that?" asked Brown sharply.

But the aged imbecile was already prattling vacuously. Repeated questioning failed to elicit more information on the subject. Giving up hope, Brown started down the rocky hillside, his mind busy with conjecture as to why the Indian should have use for explosives, and if the answer would not bring him very close to the object of his own mission.

Unexpectedly brought out of his musing by a slight sound in the rear, he turned, and threw up his arm barely in time to stop something that came writhing and hissing through the air.

Before he apprehended the nature of his peril a full-grown rattlesnake was coiling around his arm. Already the rattles were humming their song of death, when with his left hand he seized the still dazed reptile by the neck and tore it free.

Grasping the tail, he released the neck, and with a quick motion snapped off its head. Without a moment's hesitation, Brown charged up the hill in the direction from whence the strange missile had come, but all was quiet. Search as he would, he could find no trace of the enemy.

Swearing softly to himself, he returned to where he had thrown the dead snake.

"That's a fine large specimen to be slingin' at a man. Seven rattles and a button. Aha, what might this be?"

Secured to the body by a piece of cord was a scrap of soiled paper. Hastily unfolding it, he read these words, written in a scarcely legible scrawl: "You ar to smart. lok out for the deeth tide."

"Seems to be a communication. Yea, bo, if I see one of them things, I'll throw m' hat at it."

Carefully placing the note inside his shirt, he hastened on his way to the village. One house, standing apart from the others, impressed him with its appearance of cleanliness and general respectability, seeming to hold aloof from its humbler neighbors. He decided to seek lodging there for the night. When the door opened in answer to his knock, Brown, in the act of taking off his hat, stopped and stared.

Instead of a dull-faced Indian woman, as he had expected, he saw a smiling, brown-eyed girl, neatly clad in a blue calico dress, her shapely arms bare to the elbow. She had the exquisite complexion that is peculiar to those in whom there is a tinge of Indian blood.

After a certain amount of stuttering, the wanderer contrived to make known his desire.

"Yes, I think you can stay. Father won't be home until late, but he never refuses to take in strangers."

His entrance into that house marked a change in Brown. Whether consciously or otherwise, there exists in the imagination of every man the image of his ideal mate. Only in such degree as she conforms to this ideal can a woman command his affection. Dimly, Brown felt that in Louise Allen he saw his dream-woman materialized, and he was glad.

He wondered if he had aroused similar emotions in her; but, taking a mental inventory of his own charms—huge hands and feet, bullet-head, and stubbly hair—he decided that he had not, and cursed the fate that had made him. However, there was one asset of which he was unaware. About him was the air of sturdy manhood, conscious strength, and self-reliance that the railroad breeds in its workers. Possessing this, a man needs little other recommendation to the favor of a truly feminine woman.

Frankly, he told her why he had come and asked for such information as she could give.

"Why, Mr. Brown," she laughed, "you're trying to make me betray my own people."

"No, sir-ee," he responded gallantly. "You ain't no more of a savage than I am."

"My mother was a quarter-breed, and my great-grandmother was a full-blooded Indian; so, you see, I'm very much a savage."

"Well, dang it—or—blame it, I mean, I like savages, anyway."

"Thank you. But, seriously, I have heard some rumors of a plot to blow up the track a short distance north of here, where it passes near the tide-flats. They say the powder is stored there in readiness."

There was little more that she could tell him; and, while she prepared and served the evening meal, the talk drifted to other subjects. Brown related several of his railroad adventures, in which she was keenly interested. As he finished the tale of Third-rail Hawkins and Frenchy, she interrupted him to ask:

"Do all railroad men have nicknames, Mr. Brown?"

"Yes. I guess most of 'em do."

"May I ask what is yours?"

He groaned inwardly. Here was one of those pitfalls of society of which he had heard. If he told the truth, he would certainly be committing a grave offense against the rules of propriety, and to lie was cowardly. He chose a middle course.

"Ah—Limbs Brown they call me; but, say, ain't this a fine evening?"

She smilingly admitted that it was as she led the way to the front stoop. Brown soon began to feel that her companionship was very agreeable to him. Her voice thrilled him strangely, and it seemed that there had grown between them a bond of sympathy—an influence that was not less real for its intangibility. As if it were the most natural thing in the world, he told her of his cherished hopes and ideals—thoughts that he had jealously guarded from the rough contact of his every-day life.

"Do you know, Miss Allen," he said, a touch of sadness in his voice, "in the last few years I've begun to think that a man oughta figure on bein' something more than a boomer brakeman all his life. Red Bill McCrea used to say, 'What shall it profit a man if he grabs the whole world and cannot dissect the mustard?' I guess that's about right, too."

"When one realizes his mistake he is taking a long step in the right direction," she replied gently.

"But it's pretty hard when a man has to live at these railroad boarding-houses. A saloon's about the only place that'll give him the glad smile."

After a pause, he continued:

"I—I was wonderin' if you'd be willing to help a struggling young man like me, if he was trying to do the right thing?"

"Why, how could I help you, Mr. Brown?"

"It'd help a lot if you'd marry me," he returned modestly.

She laughed softly. "You honor me greatly, having known me only a few hours. But perhaps some one else has asked before you."

"Has somebody beat me to it?" he demanded.

"Well, there is Tail Feathers, son of the chief. He has offered father a great many horses and blankets for me."

When he would have spoken again she warned him to silence, pointing to the shad-

owy roadway. Gazing intently into the darkness, he discerned a skulking form, apparently carrying a heavy burden.

"If you follow him, you may find something that will interest you," whispered the girl.

"Harrigan, that's me," he rejoined eagerly.

Hastily bidding her good night, he stole away in the wake of the crouching figure. For perhaps a quarter of a mile north, along the tracks, he followed silently, careful lest by the slightest sound he should make his presence known.

At a point where the road turned sharply away from the shore line, his quarry plunged into the underbrush at the lower side of the track. With some misgivings, Brown did likewise. Now began a period of aimless creeping and crawling, guided only by the noises of the night, some of which he thought were made by the man whom he pursued.

Once he heard a peculiar sound near him, and prepared for action; but, entering an open space, he saw a small cascade of dirt arising from a newly-made hole, and knew that it was only a badger seeking a ground-squirrel for his repast.

At length, in an unusually dense thicket, he scraped against something metallic. An investigation proved that he had stumbled on three large canisters of powder. Rising to his feet, he stood motionless for several minutes, his ears strained to catch any sound that might indicate the presence of an enemy.

Hearing nothing, he stooped and pried open the cans, laying a train of powder from each one. Then, applying a match, he scrambled off at top speed.

He had gone scarcely thirty feet, when there came a blinding flash, followed by a dull report. In the instant of light he was startled at seeing a man directly in front of him. Without slackening his pace, Brown shot out his fist and the man fell, surrendering the right-of-way without argument. But other figures sprang up, and in a few moments he was the center of a silently struggling mass of men.

Brown went down fighting. Be it said, however, that before he was bound there was hardly one of his assailants who could not show marks of the conflict.

Uttering no word, they marched him down the slope. He wondered vaguely if they intended to throw him into the bay

to drown. It soon became obvious that he was not to die so easily. Coming to an old quay at the water's edge, one of the Indians forced his jaws open and thrust the barb of a small fish-hook into his tongue.

To the hook was fastened a fine wire, which they forced between his teeth to prevent its being held by them. He was then placed in a sitting posture on the edge of the platform, and the wire was made fast to a floating log that was moored to the pier. This done, his captors, one by one, glided away and disappeared in the shadows.

Only then did he begin to understand their reason for placing him there. The tide was now at its highest. When it began to ebb the log to which he was fastened would sink lower and lower until he was drawn over. With infinite pain he twisted and turned until he lay face down, his head hanging over the water.

Lying so, he composed himself to watch the wire tauten for the last time. He knew now what was meant by the "death-tide." Somewhere he had heard that among these Indians there was a superstition against shedding the blood of an enemy in time of peace. In this way they left the fate of a prisoner in the hands of their deity. If he chose to stop the outflow of the tide, the victim was released.

Brown sighed heavily. He could stand to drop out, he thought; but he had failed in his duty, outwitted by a handful of Indians. It was this that caused two bitter tears to mingle with the drip-drip of blood in the phosphorescent water about him.

Gradually the slack went out of the wire. Every slight movement of the log sent a thrill of agony through him. He writhed about in an effort to secure a moment's respite from the torture; but the inexorable pull continued, down—down—down until it seemed that he would go mad.

Then, faintly, he heard a piteous cry. The strain ceased, and he was being dragged back to safety. Some one was wiping his face with a damp cloth.

"Louise," he whispered.

"Merciful Heaven," she sobbed, "they nearly killed you! You were just going over when I came."

Tenderly she withdrew the hook from his swollen tongue.

"Do you feel better now?" she asked.

"Sure. I'm all right," was the reply. "How'd you happen to find me?"

"Old Bill Jimson was wandering in the woods, and saw them bring you here. The poor fellow would have tried to help you himself, but the younger Indians have so terrorized him that he didn't dare. Father is the only man in the village in whom he has confidence, so he came to our house. When he found that father wasn't at home he broke down and cried—said you were kind to him this afternoon, and now if you were killed it would be his fault. You didn't tell me you had met Old Bill."

"Well, well, that must have been Uncle Noahy. Yes, I met him. Met a young Siwash at the same time—feller't looked like somebody'd hit him in the chin with a crab-apple. But, shucks," he added dejectedly, "after all, I had to go and make a fizzle of everything."

"How can you say that? Didn't you prevent them from blowing up the track?"

"Yes, and let 'em catch me. But, Louise," he went on wistfully, "won't you say that I got a chance against this Tail Feathers person?"

She averted her face a moment.

"I brought your gun," she said softly.

"It might not be safe for you to return to the village."

He got to his feet and took the rifle; but, still feeling weak, he seated himself on a rock. The girl stood facing him.

"You didn't answer my question," he insisted doggedly.

"Is it a fair question, Mr. Brown? Remember, I am part Indian. Would you be content to become a squaw-man? And maybe I am already promised to Tail Feathers."

As she stopped speaking he saw that she was staring fixedly at something behind him. Suddenly she seized the rifle from his hand, and, throwing it over his shoulder, fired into the bushes. A man leaped in the air and came down in a heap, his hand still clutching a hunting-knife. Brown recognized the young Indian whom he had first met on the hillside.

"Saved again! I want my answer."

The girl pointed to the body at his feet.

"That," she said tremblingly, "is Tail Feathers."

She swayed, and would have fallen, but—Brown was there.

TO SAVE THE FLANGES.

A Lubricating Device Which Lessens the Wear and Tear on a Locomotive's Drivers.

A NEW flange lubricator, recently put on the market by the Collins Metallic Packing Company, Philadelphia, can be adjusted to meet any condition of design or construction of locomotives in service at the present time. The lubricating substance is in the form of a solid block which is very easily and quickly applied, making the maintenance cost of the appliance almost negligible.

It is claimed that when the lubricator is once set and properly adjusted it requires no attention during an ordinary trip of two hundred to three hundred miles. The only attention that it then needs is the pulling back of the latch, which is in communication with the adjusting mechanism, which provides for the pressure of the lubricating block against the wheel.

This operation is completed in an instant. The life of one lubricating block used on an engine in switching service is from three thousand five hundred to four thousand miles, and from two thousand five hundred to three thousand miles on a

passenger-engine when running at a high rate of speed.

In a test made for the purpose of arriving at the economic value of the device, it is claimed that before the lubricator was applied to the locomotive it was necessary to take the engine out of service on account of sharp flanges at the end of four months after it had made twelve thousand to fourteen thousand miles. After the lubricator was applied, it is claimed that there was very little flange wear noted.

At the end of nine months, when the engine had a credit of twenty-four thousand miles, it was taken out of service because the tires were hollow worn to the extent of five-sixteenths of an inch—the flanges showed very little wear. The tires were turned down to remove the high places and the flanges were not touched. The engine was then placed in service with the hope of getting six months' more wear out of it before it would be necessary to turn the tires.—*Railway and Engineering Review.*



THE CALL-BOY.

BY J. EDWARD HUNGERFORD.

Written for "The Railroad Man's Magazine."



NCE upon a midnight dreary, as I slumbered weak and weary,
As I rent the air with many a lusty, loud, and raucous snore;
Suddenly there came a rapping to disturb my peaceful napping,
As of some one roughly rapping, rapping at my chamber door;
Said I, waking: "Who in thunder's rapping at my chamber
door?"—

This I said—and something more!

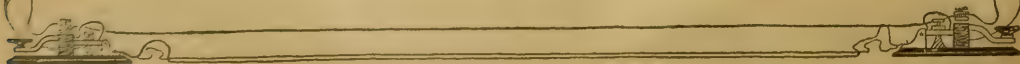
Ah, distinctly I remember, 'twas a night-in bleak December;
'Cause 'twas cold, and nary an ember wrought its ghost upon the floor;
Nary an ember threw its shadder—we had steam heat, which is sadder;
As that lobster in the hallway beat his knuckles on my door;
Loudly hammered on the panels till I thought they'd split for sure—
"Darn!" I said—and something more!

Presently my thoughts grew stronger; hesitating then no longer,
From my bed I hopped a-shiver, fairly frigid to the core;
"Hi!" I yelled, my patience snapping, "if you're bound, intent on
scraping—

Just continue tapping, rapping, beating, slapping on my door!"
This I said, my night-shirt flapping, as I ambled to the door—
This, ah, yes—and something more!

Deep into the darkness peering, toward the doorway I went steering;
Toward the doorway, never veering, feeling murderously sore;
And to still the angry beating of my heart, I kept repeating:
"Lobster! 'Tis a sorry greeting that I'll give you at my door—
What is more—dod-gast your crown-sheet!" Here I opened wide the
door—

On the Call-boy—nothing more!



Europe's Old-Fashioned Railroads.

BY CHARLES FREDERICK CARTER.

FREQUENTLY we hear reports of the antiquated rolling-stock and obsolete methods of European railroads; but unless we have been abroad and observed personally the sad state of things prevailing there, we are unable to appreciate what the traveling public of the old world must undergo in order to be carted from one point to another.

Mr. Carter, as our readers know, is an old railroad man who is one of our most observing chroniclers of up-to-date railroad topics. He has just returned from an extended European journey, during which he studied foreign railroad conditions closely for *THE RAILROAD MAN'S MAGAZINE*.

With the customary disapproval of the practical American railroader for crude and undeveloped mechanical devices that should now be at the bottom of the scrap pile, he tells of the time-worn makeshifts that are still in vogue on some of the foreign roads. What Mr. Carter saw and suffered abroad can leave no doubt in the minds of our readers that American railroads have no equal in the world.

Why the Prospect of a Railroad Journey Makes the European Traveler Think Twice Before Trusting Himself to the Tender Mercies of a Train.



TO an American even moderately familiar with the railroads of his own land, those of Europe afford a contrast that is more than startling; it is almost incredible. No amount of reading in technical journals and books; no recollections, however vivid, of the foreign transportation exhibits at the Chicago and St. Louis world's fairs, can prepare him for the reality. But when he has taken his seat for his first railroad journey on the other side of the Atlantic, it begins to dawn upon him that he is in the mummified presence of the most remarkable case of arrested development in the world's history.

The railroad stopped short in the first period of its growth in Europe, and it has

never taken a fresh start. Instead, it has been fossilizing ever since. Its railroads are one of the chief reasons why Europe lags behind in the march of progress, for adequate transportation facilities are the first and greatest requisites for prosperity, without which everything else counts for naught.

Perhaps it may be contended that European railroads serve the purpose for which they were built. So they do—after a fashion. So, also, can a man with two wooden legs contrive to walk; but no one will venture to maintain that he can walk as well as with the kind of legs usually provided by nature.

It may be something more than a coincidence that government ownership and inferior railroads are found together; but for

present purposes it is necessary to go no deeper into the subject than any tourist with a reasonably good pair of eyes can see.

The Trials of the Traveler.

When a man goes away from home in the United States he can look forward to a pleasant day or night, or both, resting at ease in a comfortable chair or sleeping peacefully in a good bed, with appetizing, well-served meals to be had at regular hours. But in Europe the very thoughts of a railroad journey sends cold shivers down his spine. Travel there is a nightmare; nothing less.

In the first place, the traveler must get down to the station at least half an hour before the train-time to register his luggage. There are no last-minute rushes to the station there, for things are not organized that way. Every pound of luggage, except hand-bags taken into the coach, must be paid for at stiff rates.

Two hundred pounds of baggage will amount to as much as a fare for one person. In addition to this, four men must be tipped to get your trunk on the train, and four more to get it off again and up to your hotel, for the railroad does nothing but haul the trunk after it has been placed aboard. These eight tips per stop are on a fixed tariff, usually amounting to eighty cents. If the hotel clerk knows his business some of them are included in the hotel bill and paid; then they are collected a second time by the tippee, making the total one dollar per town.

Adding the cartage between the station and the hotel, brings the total up to \$1.50. Lucky, indeed, is the traveler who is too poor to have a trunk. When all the tips have been handed out and the railroad's charges paid, the traveler gets a slip of white paper about three inches square, which takes the place of the check used in the United States. On presentation of this slip and the payment of four more tips, the traveler gets his trunk to his hotel at his destination.

The "Comforts" of a Carriage.

The luggage attended to, the next step is to capture a seat—if you can, and then hang on to it—if you can. This is an operation requiring no small degree of skill. The steps on the cars are designed to make

the compartments as nearly inaccessible as possible, and besides, there are always a lot of natives wanting the seat you are after, and they are more expert at scaling the steps.

There are three classes on all continental roads, and smoking and non-smoking compartments for each class. Thus there are five chances to one that you will find yourself in the wrong pew when you do get aboard. To add zest to the game, there are no separate cars for each class, but all the various classes are mixed up in each and every car.

When he is finally settled, completely winded, the American tenderfoot finds, to his measureless disgust, that the European passenger-car, or "carriage," as they will persist in calling it, has never developed beyond the stage-coach idea. In England and Belgium particularly, there are many cars built to represent three stage-coach bodies placed end to end, just like the earliest cars used on the Baltimore and Ohio away back in the thirties.

Boxes on Wheels.

They have four wheels like a stage-coach, though some of the larger ones have six wheels. Both the four-wheeled and the six-wheeled models were tried, found worthless, and discarded in the earliest years of railroad development in America. One short journey in them is enough to reveal the reason why such cars had so brief a career here. Of all the bone-racking instigators of uncharitable thoughts that ever ran on rails, they are the worst.

Passengers unfortunate enough to be incarcerated in them dare not open their mouths to voice their dissatisfaction with their plight for fear of having their teeth shaken out. The only easy riding cars found in a journey extending through six nations were on German express trains. They had four-wheeled trucks somewhat after the American fashion. A few of the best trains in England also have cars with four-wheeled trucks.

Whatever the size of the car or the arrangement of the running gear, the resemblance of the interior to the stage-coach of a century ago is more marked than that of the exterior. There is the same low roof and the same narrow, straight-backed seats placed face to face that are to be found in the old stage-coach or the more modern

brougham. Indeed, the European mind seems incapable of understanding that seats in a public conveyance can be arranged in any other way.

Even on the broad decks of steamboats all the seats are arranged in pairs to compel the passengers to sit face to face. Space in railway "carriages" is dealt out so sparingly that there is no place to put one's feet except in the lap of the passenger opposite. When he tries to reciprocate, this arrangement is found to be not altogether satisfactory.

Those straight-back, narrow seats, too, are comfort destroyers. To recline in a comfortable position is impossible. The luckless passenger must sit bolt upright, and if he wears a hat the brim strikes the back of the seat or the compartment wall, forcing his chin upon his breast.

In two minutes, he has the fidgets; in two minutes more he is in a violent temper, and a little later he has abandoned all hope of doing his situation justice in mere words, and has sunk into a state of coma from which he does not emerge until his destination is reached. There is no escape by going into a better-class car.

First-class compartments are in the same car with the second-class, and there is absolutely no difference between them except in the color of the upholstery. As the colors are not standardized, the passenger who pays first-class fare, which is pretty stiff, is always haunted by a dread that he may be riding in a second-class compartment at first-class rates.

Every Convenience Is Lacking.

No matter what the class or the country, the windows are invariably let down by a strap, precisely like those in a stage-coach or a hack—that is, unless you are so unfortunate as to share the compartment with native travelers. In that case the windows are *not* let down. If there is anything in Europe that seems to be more dreaded than water, it is fresh air.

Six or eight natives will get into one of the tiny compartments, carefully close the windows, or the window and the door opening into the "corridor," and breathe into each other's faces for hours at a stretch even during the hottest days of August. And, mind you, the windows are the sole means of ventilation. After having been made sick once by an experience of this

sort, a prudent American will never enter a compartment unless he can get an end seat where there is a fighting chance to keep the window open.

On ordinary trains there is no communication between compartments. Once shut in at a station, a passenger cannot escape until the guard comes to his rescue at the next stop. On express trains, there may be "corridor" cars. These have the inevitable compartments, but there is a narrow aisle at one side.

This does not necessarily mean that a passenger may go from car to car throughout the train. Only on the best through trains are vestibuled cars to be found. Owing to the distance between cars due to the preposterous buffers in universal use, the vestibules are long, narrow, unclean passages in vivid contrast to the familiar vestibule at home. Only "corridor" cars have lavatories.

Starvation or Nausea.

Such conveniences are regarded as the last word in advanced travel and are proudly featured by the enterprising railroads owning them. On French roads, water-tanks are carried on the roof over the lavatories, and these leak so badly that on half the cars observed the rooms were flooded and could not be entered at all.

The dining-cars are immeasurably inferior to those in America. To tell the brutal truth, they are frowsy and in need of a general overhauling at the shops. Window-shades are sometimes missing, so the sun can shine straight into the eyes of the diners, and the linoleum on the floor is often dilapidated and soiled. Instead of flowers for table decorations, advertising cards are stuck up in every available space. The meals are the everlasting *table d'hôte* luncheons and dinners, from which there seems to be no escape in Europe, with the same monotonous round of unappetizing dishes, doled out with stinging hand and the invariable slow service.

There are "restaurant cars" on the boat-trains from London to Dover, but as there is no communication with the rest of the train and no stops, the diner must enter the car at one terminal and ride to the other. For this an "entrance fee," or "seat fare," of sixty-two cents is charged for the ride of seventy-five miles. This, added to the regular first-class fare, makes a rate of a

trifle over seven cents a mile, which, it must be admitted, is ample. Once on board, it is found that tea costs twenty-five cents a cup and other things in high-cost-of-living proportion.

The only alternative for hungry passengers is the station lunch-cart, or counter. Except in France, the sole eatable to be had at these places is ham sandwiches. Generally the hard, dry rolls are not buttered, and not infrequently the ham is obstreperously *passée*. Pie is unknown in Europe, and cake is not obtainable at railroad stations. There are neither cold beans, chicken, doughnuts, nor any of the familiar staples of the railroad lunch-counter at home—nothing but ham sandwiches.

In France, however, one can buy a pasteboard box for ninety cents containing a lunch for one person. Here is an inventory of the contents, which never vary:

One roll, dry and hard as charity, without butter.

One very small slice of ham.

One very small slice of beef.

One very small piece of chicken.

One very small slice of cheese.

One bottle containing three-fourths of a pint of vile wine.

Oh, yes! Salt! There is a really generous portion of salt.

No Water to Drink.

It is foolish to get angry about it, for there is no water to quench indignation, however righteous. A passenger could parch with thirst until his sufferings culminated in spontaneous combustion for all the relief he could find on the train. There isn't any water to be had even at the stations.

It isn't possible to buy a bottle of mineral water except at the more important stations, and if there happens to be a heavy run of Americans the scanty supply is likely to be sold out before late-comers get around. On German express-trains, a small *carafe* of dirty, stale, warm water, open to the dust and the bacteria, may be found in the lavatories.

No one, even in the direst extremity of thirst, would drink the stuff. The only recourse of the thirsty passenger is to buy some vile, sour wine at forty cents for three-fourths of a pint. In Germany, the beer that cannot be sold elsewhere is peddled at railroad stations. In Europe it is considered disgraceful to drink water under any circumstances. Only the most brazen

tenderfoot from the "States" ever drinks water in public.

An American observer is filled with amazement to find that trains can be operated with the obsolete equipment in use in Europe. In England, vacuum brakes are still largely used on passenger-trains. Imagine a vacuum brake still surviving in 1910! Generally, however, the air-brake is used on passenger-trains, though it is likely to be of an antiquated type.

Steam Brakes on a 4 1-2 Per Cent Grade.

Whatever the type, the air-brake is not the safety device it is in America. Europeans seem to think it is time to find out whether the brakes are in order when they are needed. I saw many engines changed and cars set out and picked up, but just once did I see the brakes tested according to the invariable custom at home.

If a careless trainman were to neglect to open the angle-cock on the train-pipe at the tender, thus cutting out the brakes on the whole train, the joke would certainly be on the luckless passengers if anything happened. One curious antediluvian relic in Switzerland had steam-brakes to hold its passenger-trains while going down a four-and-a-half per cent grade.

Anything is good, though, when compared with freight-trains—excuse me, "goods-trains." A "goods-train" has to be stopped before the brakes can be applied. This is not an attempt to be funny, but a literal statement of an exact fact.

In England and northern Europe, many "goods-wagons," or "goods-vans," are innocent of any brake whatsoever. The others have brakes operated by a long lever placed horizontally at one side of the car in such a position that it can be operated only by a man standing on the ground. These brakes are not intended to control speed, but only to hold the "wagon" on the sidings.

When the engineer—that is, the driver—of a "goods-train" wants to stop, he simply shuts off and lets the train drift until it gets tired and stops of its own accord!

Some of the engines have steam-brakes on the drivers and all have a hand-brake on the tender.

Results of this method of handling trains are not always pleasant. For instance, on August 24, 1910, an engineer on a Paris, Lyons and Mediterranean "goods-train,"

approaching Telagh, France, saw a semaphore set against him and also saw a passenger-train standing on the main line ahead of him. The only thing he could do was to shut off, jump, and let his engine plow through the coaches, crowded to the limit with excursionists. There were no brakes and no means of controlling his train. Twenty-four persons were killed and forty were injured.

Right here is a good place to smite the popular delusion about the safety of railroad travel in Europe. We are perpetually having the vast superiority of European roads dinned into our ears, when, as a matter of fact, they are not safe at all. Here are a few samples from a sickeningly long list of horrors that is open to any one who will take the trouble to look it up:

Contich, Belgium, May 21, 1908. Collision; 40 killed, 324 injured.

Saujon, France, August 15, 1910. Collision; 53 killed, 65 injured.

Rottenmann, Austria, September 20, 1910. Collision; 11 killed, 25 injured.

Safety! How can there be such a thing in countries where brakes are almost unknown, where cars are built of the flimsiest possible materials, thrown together in the cheapest possible way, and where a large percentage of the signals are operated by women?

In the mountainous regions of Switzerland and northern Italy, some of the "goods-wagons" have hen-coops at one end, which in the case of box-cars are placed partly above and partly below the roof. In this hen-coop is a brake-staff with a short cross-piece with one end turned up like the letter "L" for a handle, instead of a wheel.

Hen-Coops for Brakemen.

The lower end of the brake-staff terminates in a screw on which a block travels up and down as the staff is turned. The brake-chain is attached to the block; thus the brakes are set as the block works up the staff and released when it is screwed down. The pitch of the thread is below the angle of repose, so the brake will stay put anywhere without the use of a dog.

The hen-coop is just large enough for a shack, or, rather, a "guard," to squeeze in, provided he isn't a very big man. There is no room for him to swing himself on the brake—but there is no occasion to swing himself. He can set the brake with one

hand to the limit of the braking power of the tiny four-wheeled car.

In case of emergency, the "guard" doesn't hustle around setting the brakes on half a dozen cars, as an American brakeman would do under similar circumstances. He can't, for those long-range buffers hold the cars so far apart that it would be as much as a man's life was worth to try to leap from one to another. No, the "guard" just stands in his hen-coop and lets events take their course.

There are three men to a train. Consequently there are three brakes to hold it. Braking-power being dependent on the weight of the cars, those three little match-boxes together hold the train back with about as much power as if a stubborn calf were tied to the rear buffer of the last car.

Seven Tons on One Car.

It is not enough to describe a European "goods-wagon" as small or light, for such words fail to tell how little it is. As a matter of fact, to American eyes they resemble pill-boxes on casters. Some of them look as if they would not hold a dose of salts. To get down to figures, the average capacity of "goods-wagons" on the London and Northwestern, which may be taken as a fair sample of the rest, is seven tons. Coal-cars run a little larger, many having the stupendous capacity of ten tons, while there are very few cars with a capacity of twenty tons. All "goods-wagons" have four wheels, two feet nine inches in diameter. The wheel-base is not less than eight, nor more than nine feet.

The buffers hold the cars from three to three-and-a-half feet apart. The only coupling used anywhere is a chain of three links and a hook like the original couplings used on the first train on the Mohawk and Hudson Railroad back in August, 1831.

It is interesting to note that the Mohawk and Hudson couplings were improved before the first run of fifteen miles was completed, while the chain couplings are still in use in Europe. On passenger-cars, the middle link is replaced by a screw-bolt with right and left hand threads and a lever to work it, by means of which the slack is taken up.

Yard work is reduced to its simplest elements. The cars having no brakes there is no occasion to ride them when kicking a cut down a siding. The couplings are so awkwardly placed that it is necessary to

come to a stop to cut off a car or make a coupling. The switchman carries a hoe-handle with a hook on the end with which to manipulate the coupling-chains, and a bugle with which to signal the engineer.

A bugle is always used to start trains on the Continent. In England the guard blows a whistle until he attracts the engineer's attention or runs out of breath. In the former case, he waves a green flag until the engineer takes the hint to leave town. In the latter, he rests awhile and then tries again. Neither the bell-cord nor the air-whistle is known in Europe.

The bugle is relied on almost exclusively in switching. Only on a few occasions have I seen hand-signals given. When these are resorted to, any sort of wiggle means anything the wiggler thinks it does. Thus I saw two Swiss railroad men signaling an engineer for the same train movement.

One gave the American standard code back-up signal, the other gave the go-ahead signal. The engineer took it all in, then went ahead. Probably he guessed right, for neither of the trainmen had a spasm.

Speaking of signals, the European codes are marvels of simplicity. Here is the whistle code as nearly as it could be compiled solely from observation:

Approaching stations, one short squeak. Apply brakes, one short squeak. Release brakes, one short squeak. Back up, one short squeak. Starting a train, one short squeak.

I heard a great deal of whistling, but no matter what the message was it was always conveyed in one short squeak.

"Squeak" is used advisedly, for the noise made by European locomotive whistles is just that, and nothing else. Not once did I hear the deep-throated bellow of the American locomotive whistle. All the whistles over there appear to have been picked before they were half-grown. The note of all of them is the shrillest attainable. Fortunately the whistles are so small and the

sound they make so weak that even the engineer cannot hear it unless the wind happens to be favorable.

In designing locomotives, as in designing passenger-cars, the great end to be attained seems to be to produce the most uncouth, awkward, and inconvenient thing possible. No locomotives have the comfortable, roomy cabs to be found on American locomotives, though the Swiss engines of the latest models approximate them somewhat in external appearance.

In France and Belgium, few engines had even the pretext of a cab. The best that any of them possess is a wind-shield with a rudimentary roof, amounting to little more than a short deflector sprouting from the top. The best of them afford little protection from snow and wind, the rest none at all. There are never any seats. Even the newest locomotives exhibited at the Brussels Exposition had no place for the engine-crew to sit down.

In many-cases the engineer stands on the left side, instead of the right. Wherever he stands all the levers for handling the machine are arranged to make his work as awkward as possible. Instead of a reversing lever, they all have a screw and a hand-wheel at which the engineer must grind for some time to "hoss 'er," as the English say.

The throttle is fearfully and wonderfully made. Frequently it is a long steel bar fastened by the middle to the throttle-stem, which rotates instead of having a longitudinal movement. To work it the engineer must face the thing and devote his undivided attention to pumping it up and down.

The prize-winner was a locomotive in service on the Northern of France. The throttle was placed in front of the wind-shield on the side of the boiler. The engineer had to lean up against the side of the boiler-head and reach outdoors to get hold of the throttle-lever!



MASON, THE GRIZZLY.

BY CHAUNCEY THOMAS.

What a Girl Like Mexie Can Do With the Heart of a Strong Man.

SYNOPSIS OF PREVIOUS CHAPTERS.

MASON, the Grizzly, and his partner, "Hungry Joe," prospectors in the Western wilds, entertain at their camp-fire a stranger who tells them of wonderful gold mines fifty miles up the mountains, to reach which, however, seems almost impossible owing to hostile Indians. Mason decides to make the journey alone. After riding all night, he comes suddenly on an Indian encampment and is compelled to alter his course. He encounters three Indians, kills them, disguises himself in their blankets and feathers, but is finally captured by a band of Utes, who proceed to put him to death in boiling water. Mason manages to escape during the excitement caused by his hurling the son of the chief into the boiling water, but is eventually captured by another band and brought back to be burned alive.

CHAPTER VI.

Applying the Torch.



NE of Colorow's squaws, worth seven ponies, came with a blazing stick. Through the tangled wood, Mason watched her light the pile.

"Fire up in a dozen places, old girl, and let's get the job over with in a hurry. I don't blame you a bit. 'Twas a shame to kill that kid, I know; but I had to do it. Bet it's the first bath he ever had. Now it's not nice for you to look at me like that—whq-o-o, that smoke gets in my eyes!

"And—whew! I always did hate the smell of burning hair—as I was going to say—I object particularly to you looking at me, for in a minute—U-g-g-g—Courage, Mason, courage! It'll soon be over—Hallo, Red Shirt, what's up!"

Red Shirt leaped onto the crackling brush and kindling fagots, swung his tomahawk and cut the raw-hide rope that bound Mason to the stake. White man and red man leaped from the fire together. Twenty of Red Shirt's sub-chiefs surrounded Mason, faced outwards and raised their rifles. Excitement prevailed. Red Shirt walked straight up to Colorow, and thundered in English that Mason might hear:

"He my prisoner! You lose him: I git him! He go on back trail! Head off soldiers! Utes have peace, or Red Shirt fight Colórow!"

The Indians divided themselves and gathered behind their respective chiefs. For a long, still minute, Colorow and Red Shirt fronted each other. Red Shirt's band was the larger; the soldiers were coming. Colorow turned on his heel and stalked away.

Mason was free. Once more he raised his eyes to the merry stars. Then he shook hands with Red Shirt.

"White brother go quick! Come!"

Handing Mason an old buffalo robe and moccasins, he led the way down the lonely cañon. Red Shirt feared to trust even his own followers; he would take his white prisoner to the mouth of the cañon himself and see him safely by the slinking outposts. Then, too, the white man would know more surely who had been his friend, who had saved his life, and when the white soldiers came he would befriend Red Shirt.

Though the wily old Indian gave Mason his life and liberty there his generosity ended. Red Shirt rode his split-ear war pinto, the swiftest long-distance runner of all the Ute horses. He was armed with a Sharpe's rifle. Mason trudged along on foot. Only the blanket and moccasins had been given to him.

Began in the December Railroad Man's Magazine. Single copies, 10 cents.

At the end of the cañon, Red Shirt halted. In his Indian ferocity he already regretted having freed the captive. But it would be a fatal mistake for Red Shirt to relent and take his prisoner back to camp.

"Red Shirt never doubles on his trail," he said to Mason, as the white man and the red looked at each other in silence.

"Red Shirt, the Grizzly will not forget. He thanks you. *Adios*."

"Red Shirt all one heap fool. He kill three white man—you, four," hissed the Indian as he jerked his rifle to his shoulder and fired.

Mason ducked. He half expected it. His fingers closed over a three-pound stone. An instant later it wedged fast in Red Shirt's skull. Hanging to his pinto's reins, the Indian rolled from his saddle. Mason gripped the snorting, plunging horse by the raw-hide bit. Remembering the service of his late disguise, Mason tore the war-bonnet from the smashed head—it felt wet in the darkness—grabbed the rifle and ammunition, and swung into the saddle barely in time.

The three Indian scouts, lurking near, made for him through the gloom, but too late. The frantic bronco, further inflamed by the smell of a white man on his back, squatted half-humped an instant, then flattened into a whirlwind run. Three arrows whistled hungrily into the empty night.

Mason was free.

Two Indians were carrying a third one, dead, up the dark, silent cañon to the Indian camp. A third ran ahead with the news. This left the cañon unguarded.

Two miles away, Mason made a wide detour to avoid a long, dark mass of advancing horsemen. Although they were moving with rapid caution, yet they made no noise. Their horses' hoofs may have been wrapped with strips of blanket. Mason kept too far back in the night to see that they were riding four abreast.

CHAPTER VII.

Still a Prisoner.

DAYLIGHT found Mason across Berthond Pass and near the hot vapor cavern now known as Idaho Springs. In 1858, this was Chicago Bar. Urging the tired pinto along through the gray mist, he was thrilled with pleasure to hear in iron Anglo Saxon:

"Halt—or I'll fire!"

Halt he did, right in his tracks. From the brush before him stepped three white men with poised rifles.

"Get off that horse and hold up your hands!"

"With pleasure, gentlemen," laughed Mason as he obeyed. Two kept him covered with their rifles while the third came forward, secured his own weapon, and took charge of the pinto.

"Come with us. Run and we shoot. Say nothing."

Not a little puzzled, Mason did so. They walked a quarter of a mile down Clear Creek cañon, one of the strangers in the lead, two behind, one of these carrying Mason's rifle as well as his own, while the other brought up the rear with the pinto.

In the growing light of the morning, the three looked hard at their prisoner but beyond exchanging glances now and then, said nothing.

In truth, Mason was a fantastic object. His hair was scorched, smoke and soot disfigured his face and skin. The Indian war-bonnet he had removed during the night and tied to the saddle where it hung begrimed with dust and Red Shirt's blood.

On his feet were fancy beaded moccasins too large for him; the old buffalo robe, with the hair worn off in great bare patches, was hung and belted about him like a cave-man's mantle. He had no head covering beyond his long hair, now tangled and full of dead leaves, sand, and mud.

On his face there was as much dried blood as dirt and soot. His left arm was bleeding from its arrow-wound and hung painfully, badly swollen. Verily, Mason was not Apollo.

Behind a clump of quaker asp the three led their prisoner. Here were their horses. At a sign from one of his captors, Mason once more bestrode the pinto, while the other two tied his feet together beneath the horse's body and tied his hands behind his back.

"But see here—" began Mason.

"Shut up!" ordered his guard, and, to give weight to his order, he gave Mason a punch in the pit of his long, empty stomach with the barrel of his rifle that knocked the breath out of him.

"Lay low is the beginning of wisdom," muttered Mason to himself. "Anyway, this is not half bad compared to the frying on deck last night—but I wish I had some breakfast."

With no more ado, the four strung out into a trot down the cañon.

"Where you taking me?" asked Mason, in defiance of another poke from the rifle.

"St. Charles—maybe hell," was the laconic reply.

Revolving this in his head, and not having the slightest idea of what was up, Mason jolted along in hungry, begrimed, and wounded silence. Down the cañon they went at a six-mile-an-hour trot. The sun was just lighting the floor of the cañon when they reached the Forks of the Creek.

So far, their route had been lonely; but from here on they passed hundreds of eager-eyed gold-seekers coming up the cañon to the Forks, all bound for Bob-Tail Hill. Each was intent on his own ends, and, beyond an interested or indifferent glance, no one paid any attention to the three men and Mason.

It was noticed that the man riding in the lead carried two rifles, and over his left shoulder—one pouch before him, the other behind, the ends tied to his belt—hung a pair of saddle-bags.

The rifle and the saddle-bags he had taken from Mason. What the saddle-bags contained, Mason had no idea. They were tied to the saddle when he vaulted into it the night before, and he did not stop to examine them.

As Mason was led at a rapid jog past the Forks of the Creek, and away from the trail up the North Fork to the new diggings, he drew a deep breath, frowned, and set his teeth, as if disappointed. His guards noticed this, and wondered at the depth of the sigh.

At noon the four rode into St. Charles, thirty-five miles away. Stiff and sore, Mason was taken from the now exhausted pin-t, led into the offices of the Ben Holliday Stage-Coach Lines, and handcuffed.

Two of his captors kept armed guard over him, while the third, leaving his own rifle in the corner, took Mason's gun and the saddle-bags into another room on the door of which was marked:

PRIVATE OFFICE
VAMOSE.

Various men came, rapped on that door, and were admitted. A crowd gathered out-

side. In an hour—a very long hour—the door opened, and out filed fifteen or twenty men.

Their leader, evidently Holliday himself—a bluff, hearty, jovial man, but one whose core was of iron—said to Mason:

"We've voted not to hang you just yet. We'll wait till the troops and the boys get back and we have the rest of 'em. Anything to say for yourself?"

"Yes. Give me something to eat; let me curry this dirt off me; give me some clothes; fix up this arm of mine; and let me smoke. If you have no objections, I would like to know what's up? I'm not on to your game," said Mason.

The bluff man looked keenly into Mason's sleepy, bloodshot, yet frank and fearless eyes.

"Pardner, you're either the whole Ute, Sioux, Cheyenne, and Arapahoe nation rolled into one and jammed into a white hide, or you're a square man. We don't know which yet—and you've got nothing to say about how we decide, either.

"But I'll tell you this, just on general principles: ten days ago our treasure-coach was wiped out by Red Shirt's band down the Platte between here and Fort Morgan. Nothing new in that, but we had twenty thousand in the chest. He got it. The red devils were led by renegade white men, and I suppose they got the money. Now the V. Cs.—that is, the vigilance committee, if you're a tenderfoot—pick you up dressed like an Arapahoe medicine-man gone crazy, and in your saddle-bags we find the whole twenty thousand—"

"I see," murmured Mason. In the last twenty-four hours he had grown hard to surprise. Then he added:

"Those are Red Shirt's brains on that war bonnet. I mixed 'em up with a rock last night."

"Very likely! So much like Red Shirt!" put in his original captor sarcastically.

"Well, gentlemen, you've got the drop. Don't hang me for a week, if you'll do me a favor. But, whether you do or not, trot out a bath, some clothes, some grub, and a smoke."

The V. Cs. went back into the private office. In five minutes his captor came out; and still keeping Mason under the three rifles which had guarded him from Chicago Bar to St. Charles, he was taken away to a stout log cabin in the bed of Cherry Creek, which, by politeness, and for the dignity of

the "city," was called "The Jail." Here, alone, in the obscurity of one small window in the plank door, after a wash and a dressing for his arm, a change of clothes, and a feast of two pounds of buffalo hump and a quart of coffee, Mason lay down to rest and think and sleep.

Outside, in the sunlight, the two guards lounged before the door. It was two o'clock in the afternoon. When at dark the guard brought in supper, Mason was asleep. The next morning, when breakfast came, he was still sleeping. Noon, still asleep. The guard gathered up the last night's supper, the breakfast, and the dinner he had just brought in and tossed them through the jail door into the creek. Then he went outside, padlocked the door, and began a game of "seven up" with his fellow warder. At four o'clock the game was interrupted by a husky voice from the little window in the door:

"Say, pardner, have you got a match?"

A boxful was handed up, and there was a grunted:

"Thanks, u-m-m-m."

Then through the bars wafted a cloud of blue content. Next came a cheery whistle, followed by:

"Got any more of that buffalo hump left?"

The player who had been winning all afternoon passed in a chunk of cold meat weighing a pound. There was silence for ten minutes, then:

"Got any more?"

This time the good-natured card-player handed in a piece of hump as large as his head, and added to it a pail of water.

Nothing more was heard from the prisoner for the rest of the day. When the guards, this time together, took in supper, Mason, a piece of buffalo meat in one hand, his pipe in the other, was stretched flat on his back, snoring like a well-developed dog-fight.

The two men looked down at the sleeping one, then at each other, and smiled with many wrinkles.

"He's no renegade," said one softly.

"Not much," muttered the other.

On noiseless toe they went out and locked the door.

Across the Platte, at that moment, there broke loose a great hubbub. There were shots, yells, whoops, beating of pans and boards—pandemonium on a boom. Down to the river through the night it came,

splashed across, and entered St. Charles. Mason rolled over uneasily and in a weak voice muttered:

"Go it, Red Shirt."

It was a long, dark mass of advancing horsemen, riding four abreast, but making noise enough to give China an earache. The Utes had been surprised in the cañon, the backbone of the tribe had been broken, half were dead, the rest had scattered like quail by twos and threes. Twenty were prisoners. These prisoners belonged to Red Shirt's band.

With the cavalcade rode Hungry Joe. The stranger had left the party at the Forks of the Creek and gone up the North Fork to the new diggings, but Joe came into St. Charles.

No sleep that night for the embryotic Denver. A small body of cavalry had been the care of the avenging force, but nine men out of every ten were St. Charles frontiersmen. The tenth came out. The jail was raided.

Mason, ready to be hung, his pipe in one hand, tobacco-pouch in the other, the buffalo meat—what was left of it—in his pockets, was shot aloft to the platform shoulders of Hungry Joe and rushed to the great town square.

Standing on Hungry Joe's shoulders astride that massive head, Mason told his story for the first time. He told of the bringing by the stranger of the tidings about the new diggings to the camp by Hot Sulphur; the saddling of Rattler; the swift, determined night-ride to get to the new diggings; the discovery of the fire and the dancing figures in the box cañon ahead; the arrow from out the darkness; the whirl and rapid escape along the back trail and into the little branch cañon; the climb to the little park; the wiggling up the ridge to pick out the route; the camp in the rain under the dripping willows, and of his going to sleep.

Then he spoke of the surprise by the Ute; the arrow-wound through the arm and into the ground where an instant before had lain his body; the shooting of horse and rider, and knifing them to the death because he dare not shoot again; the necessity of throwing the carcasses of both horse and rider into the stream; the hurried climb to the edge of the timber; the discovery and killing from behind the tree of the galloping Indian; the taking and wearing of the disguise; the dash over the ridge; the shooting in midair of the

drunken and outlandishly dressed Indian waiting in ambush; the chase-down the little cañon and through the deserted Indian camp; the shot backward from the revolver that dropped the Indian and his horse into a rolling heap; the rain of bullets, arrows, war-clubs, and stones from above; the death of Rattler, and the stunning of himself; the reviving in the icy torrent of the Frasier, where he had been thrown; his despair; and of his cool solution of Colorow.

He related briefly how he had been stripped and led to torture in the boiling kettle; how, to gain an opportunity, he had insulted the son of Colorow, then thrown him into the kettle; how, pursued, he had dashed down the cañon and right into Red Shirt's band; how he had been taken back and tied to the stake; how the fire had singed him; how Red Shirt, for selfish interests, had freed him and fronted Colorow; how Red Shirt had clothed him so meagerly; had taken him to the mouth of the cañon alone, and had devilishly tried to kill him; how he had brained Red Shirt with a stone, grabbed his pinto, head-dress, and gun, escaped the three scouts, and got away; how he had unknowingly avoided the dark, silent, avenging column of justice-dealing white men; and how, at length, he had been arrested.

The very rudeness of his speech graced his cause with these pleasant, gay, and radiant soldiers. They swore that he was a square man, and when he called on his living rostrum and the Indian prisoners to witness it, the jovial Holliday shouted:

"Why didn't you say so before?"

"Yes, *why?*" yelled the crowd.

"Would you have believed it?" asked Mason.

"No-o-o!" came doubtfully from somewhere.

The rest were uneasily silent.

Just what happened the rest of that night Mason never clearly remembered. This he does know: The town was full of men, too many for whom to find beds. When day was breaking he and Hungry Joe went back to the jail. The door was open, and inside, on the bare floor, lay his three recent captors, asleep. As the place smelled like a moonshine distillery, Mason had no fear of awakening them.

Hungry Joe, selecting the fat leg of one for a pillow, settled down to sleep. Mason took the place next the door. "To git the air," drowsily thought the huge gambler.

From there, perhaps, Mason could see the morning star.

CHAPTER VIII.

Cherry Creek and the Lady.

MASON awoke with kicking temples and a skin that was hot and dry and tight. Hungry Joe looked him over, and announced solemnly, "Mountain fever."

That was the beginning of a five months' siege that left Mason weighing but ninety-five pounds, a parchment-covered skeleton barely alive. Then slowly he grew better, and for two months did little but sit in the sun and eat.

All thoughts of the new diggings had gone long ago. The country was staked for miles, and it would be months before he could again pound a drill or stand in the icy water of the gulches with a pan or rocker.

That ride had been too much for Mason. It was too much for any man. But the men who had cheered him that night in St. Charles did not let him die. A log cabin has plenty of chink-holes, hence it is a good hospital. Buffalo soup, and baked apples at twenty-five cents apiece, are ideal for a typhoid digestion. No other medicine than quinin, pure water, and fresh air worked wonders. Slowly he grew strong again.

Then did bluff Ben Holliday recall that Mason had saved his firm twenty thousand dollars. He offered Mason one thousand dollars as a reward, which Mason promptly refused. Then the stage-man offered him a loan—any amount. This Mason also refused.

Again did Holliday proffer help; this time a stock of books and stationery found but little injured among the burned wreckage of a raided wagon-train. Its owner lay scalped beside it with twenty-seven arrows in his body; his heirs and his name were unknown.

After an hour with his pipe Mason quietly accepted this offer. The next day St. Charles had its first book-store. Mason was clerk, janitor, and proprietor. Business was brisk. Soon, in a small way, he began to lend money. His standing as a "square man" drew to him sundry little buckskin-bags full of gold dust and nuggets for safe keeping.

Mason did what primitive banking St.

Charles required. The large accounts, such as Wells, Fargo & Co., and all Eastern business, was of course handled by Holliday. Mason loaned a little when he had it to spare. Thus business prospered with him. In the new diggings, forty miles away, many struck it rich, but more came back to St. Charles hungry and desperate.

The fever that Mason had cursed he now blessed; for, being a late arrival, he too would probably have been among the hungry ones. As it was, he had a good, though modest, business, steadily growing better. But it was not the profits that Mason valued most. He had found a goldmine right on his own shelves—a bonanza of words, of thoughts, of feeling—his books. Mason was his own best customer. What ruins a saloon-man makes a book-dealer. He began to keep a diary, not of events alone, but also of his thoughts and impressions. This diary it has been my privilege to see and make extracts from.

But there is a fate that shapes our ends, rough-hew them as we may. In the spring of 1864 it rained for ten days on the Divide twenty miles to the southeast of the headquarters of Cherry Creek, yet that bed of sand remained almost dry. Suddenly, on the tenth day, a wall of water and liquid quicksand six to eight feet high rolled down Cherry Creek on the helpless settlement. It was the last blow of the wilderness. Under it civilization all but strangled: but the settlement revived, lived, and to-day is the Queen City of the Plains.

When darkness settled over gasping Denver, Cherry Creek was once more a gentle little stream, barely six feet wide, rippling along in innocence. Only its mud-diness told that it was still malignant.

A man stood on the bank where, that morning, there had been a book-store. This man was Mason. Silently he watched the passing water.

"Give me back my books!" he muttered. Then he glanced up at the kindly stars. When his eyes again fell to the water at his feet he laughed quietly, and lit his pipe.

Between igniting puffs he mused aloud:

"Now—puff!—for the—puff!—puff!—mines of—puff!—Montezuma."

He seated himself on the sand-filled wreck of his store. As the smoke floated in slow curls from his lips he fell to dreaming.

The wilderness had robbed Mason of all he had.

Cherry Creek was a slimy stretch of muck and quicksand a mile wide. Here had stood the heart of Denver. It was gone.

But not a day nor a sigh did Denver waste. The wrecked part of the town was to be rebuilt at once, this time on high ground back from Cherry Creek and the Platte, safe from all floods.

Mason did not forget his banking business. He hunted up those he owed—they did not seek him out in his misfortune—and transferred to them the debts owed to him for money loaned. This done, he had left one thousand dollars, a good Indian pony and outfit, a clear name, and a clean conscience.

Ben Holliday again offered help, but this Mason declined with a shake of the head and a silent grip of the hand. As they were about to part, the Overland coach rolled up to the door. An Indian arrow stuck in the leathern baggage boot behind. From the coach stepped a young woman, evidently from her dress and manner a widow.

"Can you tell me where I can find Mr. Holliday?" she asked.

"I'm your man, madam. What can I do for you? It's yours to ask."

"I beg your pardon, Mr. Holliday, but I have come all the way from Iowa to find my husband. He left for Pike's Peak in the gold rush of fifty-nine, five years ago, and disappeared. I prayed that he was not dead; but, at Leavenworth, I was told by one of your drivers that a train similar to the one he had joined there was captured and burned on the Arkansas by the Sioux in the late fall of 1860.

"He said that you, Mr. Holliday, could tell me more; so I came to you. My husband was named Decatur—Robert A. Decatur. He was coming to Denver to open a book-store—"

Holliday and Mason exchanged such vivid glances that the woman stopped, and shuddered. Then big-hearted Holliday told the shrinking woman how the wagon-train had been found a charred wreck, how her husband lay sleeping beneath the grass roots by the Arkansas, and how the books had been found and saved.

Then he looked at Mason and stopped. The woman, brave as steel, was standing, tearless, waiting for the rest. Then Mason spoke.

"Mrs. Decatur," he said, "your husband's books came into my possession. There was no one to claim them; no one

knew of him; I took them. Last week they went down Cherry Creek. They are all gone. Their value was twelve hundred dollars. I have one thousand dollars. That is yours. Holliday, lend me two hundred."

Without a word, but with a light in his warm, blue eyes that was good to see, Ben Holliday weighed out ten ounces of gold-dust and handed it to Mason. From his hip-pocket Mason pulled his own buckskin sack, and handed both to the amazed woman. She protested. Holliday mildly insisted, and with gentle firmness forced her to accept. Mason looked longingly into his empty pipe.

The night-coach was about to leave. Mrs. Decatur turned to Holliday and asked for a pen. She rapidly wrote a page and handed it to him.

"Read it when I am gone," she said.

She gave her hand to Holliday and thanked him warmly. To Mason she gave both hands—and said nothing. But Mason knew.

As the coach, with three mules in the lead and two on the wheel, lumbered away into the dusk, the two men, a little apart from the rest, swung their broad, black hats in answer to a good-by flutter of white that a dainty hand held out of the window. Her other hand held every cent Mason had had on earth.

"If it hadn't been for Cherry Creek last week that little woman would never have gone back to the States," Mason said to Holliday.

"Why not?"

"'Cause I would have married her."

"Well—I'll—be—hanged!"

"Perhaps she has proposed herself," laughed the bluff stage-coach owner, "let's see what she says—" and he opened the paper Mrs. Decatur had given him.

"Well, Mason, allow me to congratulate you. The dear little thing thinks she has outwitted us, after all. Here is a deed, drawn in true feminine fashion, it is true, but still perfectly good, for a mile or two of Cherry Creek sand flats that some land-faker or blasted Pike's-Peaker in the back trail has sold her—more likely given her. She deeds it all to you, Mason; you! I'm jealous! It's worth, counting in the prairie dogs and cactus, about forty cents in counterfeit currency. You own Cherry Creek, Mason!" Holliday roared.

"Ugh! What a joke. She, God bless her, meant it as a million. But I've got

all the Cherry Creek I want. Here, give it to me—" reaching for the paper—"I want it as a keepsake. I'm off for Mexico to-morrow morning."

"Not much, my boy. Keepsakes are all well enough. This goes on record first, and then you can have it for a keepsake—and the lady, too—wasn't she a darling! Cherry Creek might be worth a thousand dollars some day."

"Give me the lady and you can do as you want with Cherry Creek. Got a match?"

CHAPTER IX.

Mexico—the Forgotten.

MEXICO. The Egypt of America; old when the Anglo-Saxon was born. When the wolf suckled Romulus, Mexico had a forgotten history of a forgotten race and civilization. Did you ever read Prescott, the blind historian of ancient America? Do so. Then when you read of Grecian games, played seven hundred years before Christ, of the expedition after the gold-filled sheepskins lining crude sluices in Asia Minor, of the sweating slaves who built the pyramids, of the glories of Babylon, now buried beneath half a hundred feet of dust, of the hoary tales of the yellow man—when you read of all these until they seem to have been but yesterday and long for something older, turn to Mexico.

Here fought and conquered the bravest, the most determined man of history—Cortez. Here, in royal green, ruled Montezuma. Here was the magic land where Spain found new life and for a time became the modern Rome, the ruler of the world and the waves. Here is where Lew Wallace wrote, where General Lee learned the art and science of war, where Maximilian died, where Diaz rules to-day.

Do you believe that between the shores of Mexico—or the outlying Antilles—and the coast of Africa, thousands of feet beneath the blue waves of the Atlantic rests the cradle of man, of civilization, and of the world—Atlantis? No? Then read.

Whence came this now dead, now forgotten civilization? Whispers echoed from the depths of time, legends told by dark lips, tell us that a White God, so it seemed to the copper-hued race, once came with the rising sun out of the distant waters of the Atlantic. He taught the dark people

the ways of civilization. Then he left them, going east, over the waves, but promising to return with others of his kind.

When the steel-clad, steel-souled Spaniard burned his ships and faced glory or certain death, this superstition won more for him than did his sword or his awe-inspiring cannon.

Montezuma himself, each morning, knelt to the rising sun, hoping that his eyes might see the promise of the White God fulfilled. To-day, the Zuni Indians and other tribes who live in the pueblos, at each sunrise, mount the mud walls of their hive-like dwellings and watch for Montezuma and the White God to come with the morning light.

Are the legends of the North or the East more beautiful than these? Legend, the all but silent historian of forgotten ages, also murmurs of a race of cultured warriors, sailing the unknown waters beyond the Pillars of Hercules, who safely plowed the waves of European seas while yet the timbers of the first Phœnician galleys were saplings.

Did you ever compare Egypt and Mexico? Do so. It is an education in itself. If you would study Rome, where would you go? To Italy? Yes. If you wished to soak your mind in the indescribable influence which hovers over the Pantheon like a winged goddess, would you sail for the shores of Greece? Then, if you would study the most ancient of countries, you must study Mexico. "It is not the most ancient," you say. Go to Mitla, in southeastern Mexico. On the ground read Prescott. Search the world for a man to read unto you the writings on the stones at Mitla. You will not find him. Yet to many the writings of oldest Egypt are as clear as motionless water. Here is something older than the Sanskrit tongue.

On a dripping mustang, Mason rode up from the south to a New Mexican sheep ranch. The years in Mexico had changed him greatly. It was August in the early seventies. The time was noon. Out over the glimmering desert, the atmosphere quivered like transparent jelly. On the horizon, the fresh, cool mirage came, lured, vanished; only to tempt again from a new point.

Squatted against the adobe in the full glare of the sun, wrapped in a serape, silence and mental mystery, shaded by all his wealth—his sombrero—was a dejected Az-

tec. He was not a Mexican, the hybrid offspring of a hated father, a despised Aztec slave; but a pure-blooded Indian.

His free, fierce forefathers, six hundred years ago, poured from the unknown in the Northwest down into what is now the Valley of Mexico, conquered, and for three centuries enslaved the milder Toltecs. Here these Moors of Mexico, in their turn, died nobly beneath Spanish steel. But the Aztec spirit was almost gone. Its embers smoldered in this morose shepherd, glowing only in his eyes.

He and Mason ate in silence. During the stifling afternoon they slept. With cool evening came the sheep and a delight—La Señorita Mexie. The girl was the half-breed daughter of Mason's surly host. Her white mother was long since dead.

Small, slender and trim as a deer; lithe as a puma; just bursting into throbbing womanhood; pulsating with life; now dreamy as the lotus; now trembling at a glance, this little Cleopatra had the mind and manners of her evidently gentle mother and the instincts of her half-savage father.

A Venus in living bronze; her nature was too wild to be civilized, too civilized to be wild. From high-arched moccasined foot, narrower than Mason's wrist; to her low, broad forehead shaded with six great curls, as dark and fine as skeins of black silk; Mexie was as dainty as a nymph, never bold, always demure, and ever fascinating.

What might suddenly become animal grossness, in Mexie, at this time, was white fire. The peons called her "The Breath of the Morning." To Mason, she was but a child and he revered her goodness.

This girl—unsullied by civilization—had not learned to lie. Nature never lies.

"What is a lie?" she asked Mason one day.

"To lie is to allow another mind to have a false impression," he answered.

She slowly repeated the definition. "To-lie-is-to-allow-another-mind-to-have-a-false impression."

After a wordless hour she said: "I like that." A day later he heard her murmur, "then one can lie by keeping silent."

Mexie had but three virtues and the greatest of these was charity.

Books they read. In his saddle-bags was the tale of Troy divine. Solomon, in all his wisdom, spoke to them. Under the

chaparral, *Lear* raved, the *Moor* pleaded, *Macbeth* cursed, *Antony* praised, *Hamlet* pondered. Of these men Mason read aloud, and they spoke of them as friends.

Mason stopped for a meal; he stayed a month and dreamed that he would return again—perhaps, once too often. Pounded corn, pepper, beans, mutton, coffee, books, and the guitar; the world forgotten, the desert, and Mexie; all a lazy dream, but enough—for a month, perhaps for life.

In the frosty morning, they drove forth the flock. Far from the corrals, during the blazing moon, they rested in the shade of the chaparral. At evening they followed the sheep home to the ranch, there to find the Aztec still sitting, still smoking, still silent.

Seated one evening in the moonlight, the Aztec, the girl, and the *Americano* were the sole inhabitants of three hundred square miles of desert. The guitar was silent. "La Golondrina," the lament of the Moor leaving his Granada, and "La Poloma," were the plaintive airs she played for him, often taking up the strains in a voice as sweet and clear as tinkling water. In the starry stillness, Mason read from the tablets of his memory. A lizard twinkled across his hand and the desert became the salted plains of Babylon fertilized with man.

Tired out, Mexie, wrapped in Mason's coat, was stretched with the abandon of a child on the ground at his feet—asleep. Watching, dreamily, her face half shaded in billows of hair, he was drawn from the Asiatic to something older, the Aztec.

"Señor, tell me of the lost mines of Montezuma?" he said.

Silence, a frown, a scowl; corn husk cigarette rolled; then, in liquid accents:

"Gringo all fools, señor. There are no lost mines of Montezuma."

The smoky words died away. The living silence came again. But the brown face was kindling. A soul was surging there. Then in words sometimes lingering, sometimes spit from the tongue, came the Aztec's story.

"Listen, I will tell you. My mother, señor, was from one of the wives of Montezuma. In my mother's veins was Montezuma's blood, and I am her son. My father, and after him, I, once owned this ranch and all the cattle. I studied in the military schools of Chapultepec. I was not always this. I was a soldier, an officer, before monte and mescal made me what I am.

Sick at heart, my Lady of the Snows, my wife, Mexie's mother, withered and died. I became a sheep dog, almost a peon, my little girl—but now she is a woman, is free to do as she wishes. I could not influence her if I tried. You, *Señor Americano*, are the first man she would ever obey. If you wish her, she is yours. When her blood loves it worships, it idolizes, it becomes a slave, it adores—but beware the hate of the rebound."

"But I know your language, I once read your books; I know the history of Mexico."

"When the Spaniards came, our great and good Montezuma remembered what his fathers had taught him; that the White God had gone over the waves into the Morning Sun and some day would return on great white wings to rule again over the lands and lakes of Mexico.

"When runners came from the salt sea to the great city on the lake with fresh fish for Montezuma—ah! señor, that is two hundred miles and our people ran it in a day and night, so swift and sure of foot were they—they told the great king that angels in shining scales, having white faces and hair of gold, riding huge beasts from whose feet flew fire when they rode on the rocks, who killed with the thunder-fire and volcano smoke, had landed on our shores; then Montezuma knew that the Aztec's hour had come.

"He sent to them many kinds of gifts. One was a Spanish helmet full of placer gold. Another was a wheel of pure gold thirty palms around. In your money, señor, it would be worth three hundred and twenty thousand dollars; but much more in those days. Another wheel was of silver worth twenty-five thousand dollars. With these gifts came many others, fine cotton and feather cloth, and jewels. With them Montezuma sent this message: 'White Gods, go back into the sea!'

"But Cortez, the Cæsar of America and of medieval times, burned his ships and marched into the heart of our capital, señor. Brave? Yes, magnificent—but fatal to the Aztec.

"Then Montezuma gave to Cortez all our treasures. His father had hoarded gold, silver, emeralds, pearls, fine cotton and feather fabrics all his life. These were Montezuma's, yet he gave them all to the Spaniard. Three great heaps of gold there were; the value, in *Americano*, was six millions, three hundred thousand dollars.

"Then, *señor*"—Mason saw the snake-like eyes scintillating—"came the melancholy night. That night Montezuma died. It was June 30, 1520. He sleeps in the princely shades of Chapultepec, no one knows where. The deep-toned war-drum of Guatemozin, the last of the Aztecs he is called, *señor*, sounded over the city and we fought in the dark till the morning light the 'Battle of the Causeway.'

"Ah, *señor*, the blood of four hundred and thirty Spaniards and four thousand Aztecs stained the waters of the lake. Every Spaniard whose black soul crossed the Great White Range that night was chased by ten fantom Aztecs. There was laughter in the heavens. We won! There Alvarado, the Child of the Sun, the Spanish captain, made his leap. There, *señor*, were lost all the Spanish guns and cannons; all their powder and all their gold. Into the waters of the lake it went; it is there now. Santa Maria be praised! That fight, *señor*, was the greatest defeat ever suffered by Spain on *Americano* soil. Magnificent! Of a little over six hundred Spaniards, we killed two-thirds and made them drop their spoils.

"Ah, *señor*! They were gods. Wounded, starving on wild cherries; armed with only mail, sword and lance; with only twenty-one horses and no firearms; flying to the sea for life; those two hundred weary, wounded Spaniards, aided by only a few savage Tlascalans, in the Valley of Otumba, fought two hundred thousand Aztecs.

"The valley was white with our cotton armor, it was full of fighting men. It was one White God against a thousand of my people. A hundred of my fathers died on every Spanish sword. Twenty thousand were slain. The tired Spaniards, each with a new wound, were dying hard when Cortez, twice wounded, plowing on horseback through the battle, with his own hand killed Cihauca, our chief. Like sheep from the wolves flew the Aztecs. The valley was empty. The Spaniards had won.

"*Señor*, when troubles pile upon you remember Cortez at Otumba. Yes. Remember Cortez at Otumba.

"Then with more men from over the salt waters, and aided by our slaves, back they came. For seventy-five hungry, bloody days, *señor*, they once more soaked our streets and temples with Aztec blood. The largest, greatest city in the New World they leveled to the mud. My people were slaughtered; our emperor, Guatemozin, they cap-

tured, tortured and hung, after sweet, false words of sworn safety.

"*Señor Americano*, my people in our capital made the most desperate defense in history. Men died before Roman arms, *señor*, but not like my people. Then the men alone simply died fighting. Our warriors used their wives for food. Women ate their babies. The men and boys with bare breasts and empty hands, the women with their children in their arms, leaped from the housetops down onto the Spanish spears; to bury them, to smother the slaughtering fiends under heaps of dead, to drown them in our blood.

"For an hour after the fighting, the parched Spaniards could not drink, so clotted with our blood were the running waters.

"The Spartans in the pass died before the Persian, that their wives and children, city and country, might live in peace. The sea moans beside their marble—but we are forgotten. We, the Aztecs, ate our wives and children, destroyed our city, perished with our country. We did this thing from choice.

"Honorable surrender, with freedom, was always open to us. But even our children died fighting. At length the time came when, weak and helpless, we could fight no more. The few left alive did not surrender; they were captured, then enslaved. Who weeps for the Aztecs?

"*H-s-s-s!*" The Indian's breath hissed between snarling teeth. "But they found no gold! We laughed at them; then died beneath their dripping steel; our lake had our gold—ha! ha! ha!"

The voice of the Aztec rang out over the desert in fierce exultation. From the distance, the snarling jangle of a coyote answered like an echo. The wild laugh awoke the sleeping girl. She stirred uneasily, slowly opened her eyes, then smiled drowsily at Mason.

She rolled closer into the coat, cuddled nearer, and caressingly patted his moccasin foot with her fingers, lightly touched it with her lips, pressed her cheek to it for a pillow, blinked at vacancy and with a sleepy sigh was dreaming again. The Aztec was silent; his gleaming eyes piercing the horizon.

It was all so strange, so wild, so—Looking down at the black, silky head on his foot; the fresh, fascinating face; the perfect form, the fairy foot, Mason knew why Mark Antony gave the Roman empire for such a woman.

Civilization or Mexie—which?

Mason wanted both; but both were impossible. Remove the jewel from its setting and its luster would be lost. Others had done it; turned to another race for the sake of a foreign woman. Why not he? He had no other ties.

"After many battles," broke in the Aztec, "the Spanish Cæsar sent less than one million dollars to his king."

The voice was low, the tone was bitter; the blood of Montezuma ran riot in the moody Aztec.

"A French privateer captured the Spanish galleon;—and Francis the First, the French king, had the gold, and laughed at the Spanish rage. Once Cortez sent a gold and silver cannon to Spain, *señor*, worth two hundred and fifty thousand dollars. That was for show.

"From such deceits grew the stories of my Aztec fathers' enormous wealth. In gold and silver, we were as poor then as now; only in manhood were we rich. Our mines we knew not, nor how to work them. What gold we had, *señor*, came from the streams and where the lodes were rich on the surface. The great stores of gold and silver that came from Mexico were mined by the Spaniards themselves. *Señor*, the demon is dead. An Aztec rules once more in Mexico. Where Montezuma sat now is Diaz.

"*Señor*, a light? My thanks to you, my friend; the fire—the fire on my cigarette is dead. I forget everything, *señor*; but my tale is done.

"When Cortez sailed for Spain he had only two million dollars in gold and silver treasure, and half of that was his king's. But he had five emeralds, *señor*, carved by my people into shapes of flowers, buds, and bells. They alone were worth one million dollars, and were coveted by the Spanish queen.

"We had no steel; we knew nothing of iron, although it was all about us. Tin and copper we used, hardened in a way now forgotten—a lost art they call it, *señor*. We cut the emerald with it, *señor*. Except to the value perhaps of ten million dollars, all the gold and silver in Mexico has been taken from the rocks by white hands. Of the ten million my Aztec fathers had, a little of it is the world's; some was lost in battle and shipwreck; the rest is in the lake. For the lost mines of

Montezuma, *señor*, seek no more—it would be labor lost."

The Aztec arose, dropped his serape on the sleeping girl, and left them. Thinking, thinking, thinking—Mason's eyes and thoughts roamed the cold desert and the perforated heavens. His foot grew numb and cold. To move was to disturb the breathing bronze.

The moon set. The coyotes and the prairie-owls left them. Cold, dark silence came. Dazzling white the morning broke. Mason had not moved. Yet his thoughts had searched the universe.

Foolish? Perhaps; yet for him Mexie had once done the same, and would do it again. Had he not the hot moon to sleep, while she, fanning him, watched the sheep?

In the Indian, the desert, and the night Mason lived and loved that of which civilization does not dream. There was something that lured his nature.

When the sun burst over the sandy horizon like the throat of a raging cannon, when the sky grew brassy and the lizards crawled from the griddle rocks, the Anglo-Saxon shook himself. His conscience was growling. All that day he was more sullen than even his ugly host. Mexie coaxed like a kitten; Mason brooded like a bear.

Go! Go! Go! He must. When the shadows were stretching for the east Mason saddled his horse. The Aztec rolled a cigarette; Mexie drew a dagger from her garter and hid it in her sleeve.

Then Mason, holding his bronco by the bridle, stood before them.

"Where go you, *señor*?" asked the Aztec.

"To find the mines of Montezuma."

"But there are no mines of Montezuma, *señor*. What will you do?"

"Find better ones."

The Aztec shrugged his shoulders. Mexie leaped for Mason. Quick as she was, the spring-steeled Northerner was quicker. He caught the flash of her arm, held it for an instant as gently but as firmly as a plaster cast, and kissed his hand.

Then he swung into the saddle—and rode away.

Before a lone herder's dugout on the desert sat a man and a girl. The man's cigarette had been cold for an hour; the girl watched a speck ride into the setting sun.

(To be continued.)

Observations of a Country Station-Agent.

BY J. E. SMITH.

No. 32 — Sometimes Christmas Cheer Has the Right-of-Way Over All Things, and Sometimes It Gets Switched on a Blind Siding and Stays There.

MERRY CHRISTMAS! Mr. Railroader, wherever you are, and a Happy New Year!"

These are the bell-ringing, home-coming days, and only the joyous shouts of the children break the brooding peace of the world.

Again—"Merry Christmas!" whether in station, tower, or on the road.

Some one must shout it.

Some one must bawl you out, Mr. Santa Claus, with all your sly tricks and showy doings and surprises. Some one must remind them of you, for they have almost forgotten you, Mr. Santa—the train-crew, the yard-crew, and the station-crew.

You are no cotton-whiskered fraud to them, Mr. Santa, because all they remember about you was your doings when they were boys. They have never seen you since, Mr. Santa Claus. They hear of you, and eager and exaggerated stories come to them from the children at home, but this holiday time, with its feasting and gift-giving and subtle suggestion of sacredness, is not for them.

For around this time the days are shortest, traffic is the heaviest, and all the regulars and reserves are called out to fight the snow and cold and keep the business moving.

The coaches and the stations are crowded. People are going home. The baggage-trucks are piled high with trunks and grips. The expressman labors under a mountain of unsorted and unchecked packages. The ticket-agent has an eager and impatient

throng at his window. The trains become later at every station, and the passengers implore the conductors not to miss their connections.

But they do miss, and the passengers cry out in vexation. Trunks go wrong in the rush, packages are lost, and there are woes and worry and wrath for the dull ear of the overworked transportation man.

So—"Merry Christmas, Mr. Transportation Man!"

We are shouting it two weeks ahead of the timely hour, for if we waited until the seasonable moment you would return a cynic's sneer and heap some guttural imprecation on our heads, for there can be no "merry" anything when the multitude rushes upon us and overwhelms us with its demand for attention and service.

Nevertheless, these busy men have their Christmas experiences, and many of them are worth narrating. This brings us to the story of "Bud" Brown's Christmas dinner.

Bud has run an engine on our road for a number of years.

"Do you know, Bud," said his wife, one December day, "we have been married ten years Christmas Day, and we have never had a Christmas dinner together? Every Christmas Day you have been on the road, or have just come in, or are just going out. Next Thursday's Christmas again, Bud. Can't we arrange it to have a big Christmas dinner, and have our folks with us and you be here, Bud?"

"I can't lay off, Molly," said Bud. "They

are very short of engineers. There's always a lot of them sick this time of the year. Business is awful heavy, right now. The corn crop is moving. I think I'd have to be sick, but maybe I can arrange it some way to get in. We'll try it, Molly."

And so it was arranged.

Next day Bud explained it to the road foreman of engines, who promised to do what he could, and Bud went out to Chicago with a drag.

It was only a few days until Christmas. At home, Molly and the children had entered into the spirit of the Christmas-Day feast and the family reunion with great interest. There was much planning and buying and scheming and enthusiasm of detail, all with the central idea that Bud would be with them.

In Bud's home it was a great event. If Bud had been an exile of Timbuctoo for years, and this was his liberation and homecoming, the children would have been in no greater commotion or expectancy. It is the way of the human heart. The greatest pleasures that come to any of us are the

little things that spring from our family affections.

Bud, as an honored guest, was determined to be there.

He returned from Chicago in the night, and was called for a trip east the next forenoon. After the usual rest at the end of this trip, Bud took out a Ridgeville turn, which brought him back to the east-end terminal the following day.

Bud could now figure his movements and probable whereabouts on Christmas Day with some degree of certainty.

If he got out on his regular turn, he would get home the evening before, and this would mean he would be called Christmas morning.

Bud used a little diplomacy.

All the trainmen lived at the other end and were always anxious to get out on the first opportunity for the return trip.

Bud swapped his turn with a later arrival. When he came up again he swapped once more.

His behavior was a mystery to the other trainmen. He was accused of plying for a better engine or for the merchandise run.



"THIS IS WEDNESDAY, THE 24TH! WELL, OF ALL THINGS!"

The general opinion, however, was that Bud had gone "batty," because no one in his right mind would lay over at that end of the line of his own choice.

Bud squandered three opportunities, but made no explanations. Then he figured it out that the fourth turn would put him out early in the evening and land him at home Christmas morning, before noon, at the very latest.

Thereupon, although besieged and importuned, all other trades were declared off, and Bud got under way at ten o'clock the night before, with "all she could pull."

Now, fate in the affairs of man has many inscrutable ways beyond the understanding of a railroader.

Bud crowded her, but the engine behaved badly, and the dispatcher gave him two bad stabs.

At seven o'clock in the morning he was still fifty miles out and on a siding.

He walked down to the tower and sent this message to the roundhouse to be phoned to his wife:

Am coming. Ought to be there about eleven.
BUD.

He got away at length, but he had another bad meeting-point, and at ten o'clock he had covered only half the distance. Then he sent another telegram:

Wait for me. Can't get in till twelve.
BUD.

At twelve, Bud was ten miles out and had made his last stop.

He sent another telegram to Molly:

Hold everything, Molly. I'll be there a little after one.
BUD.

Then he sent this message to the roundhouse clerk:

Telephone O'Connell's livery-stable to have a cab at roundhouse for me at one o'clock.
BUD BROWN.

"Hey!" yelled the operator as Bud was climbing back on the engine. The roundhouse operator wants to know if it is the ambulance you want, and if any one is hurt?"

"No!" yelled Bud. "It's a cab! C-A-B!"

"And, he says, your wife wants to know what's the matter with you?"

"She knows!" yelled Bud.

Bud answered the rear signal, and once more got under way.

There were no further delays of consequence.

Bud got off his engine at the ash-pit, and made out his time-slip on the jump, tossing it in to the roundhouse clerk without stopping.

A cab awaited him, and Bud tossed the driver a dollar.

"Drive to 3010 High Street," he shouted. "If you can make it in eight minutes, keep the change."

The cabby made it in seven minutes and thirty seconds—faster time than Bud had made on the trip in, but with better padding for the jolts.

Bud sprang out eagerly and ran up the steps.

"I'm here, Molly!" he cried. "I made it! It's only a little after one!"

A strange quiet was over the house.

"Bud! What in the world is the matter?" exclaimed Molly. "They have been telephoning me all morning! I didn't know what it meant! I am so nervous!"

"Why, Molly! The Christmas dinner, you know!" gasped Bud. "I made it! I got here!" he went on, half appealingly. "You haven't forgotten it, have you, Molly?"

Molly waved her hand despairingly.

"Why, Bud Brown, you stupid thing. This isn't Christmas. This is the day before! This is Wednesday, the 24th! Well, of all things!"

Bud stared at her with open-mouthed stupidity.

"Ain't to-day—"

Then he stopped.

"Molly, I'll wash. If you'll fry me some eggs and some of the bacon, I'll go up-stairs and go to bed. I've been up all night. They'll be after me before morning."

Late in the day, he was asleep. Molly tiptoed to the stair door and heard the heavy, regular breathing that tells the forgetfulness of all things—Christmas, railroading, and all the little joys and petty disappointments of our lives—then she sat down and cried softly and silently.

Bud was called at four o'clock, Christmas morning, and went out with a train of coal for Chicago.

Early Christmas morning, the folks came in from the country. Finding that Bud could not be at home, Molly and the chil-

dren were persuaded to return with them and spread the feast and have the day's festivities at the old homestead in the country. Bud's house was deserted.

Thirty miles out, Bud's engine went wrong. It sulked and balked on Christmas-Day service. Bud did all an engineer could

"Let me use your phone!" cried Bud.
 "Hallo, Central! Give me O'Connell's livery-barn. Hallo, O'Connell! This O'Connell? I want a rig—a good stepper. Want to go six miles in the country. Want to be there by noon. Engineer Brown—High Street. Come right—"



"THAT'S A FINE CHRISTMAS GROUCH YOU GOT," GRINNED THE WAITER.

do, but she would not steam. They got into clear and another engine was ordered out to take the train.

Bud took the cripple back home. He sent a message to Molly:

Coming back. Be there about ten. Budly.
 BUD.

He returned. It was about ten when he rushed up to the house. The blinds were down and the door was locked. Bud raced to the rear of the house and shook the fastenings with an impotent fury.

"Molly! Molly!" he cried.

A neighbor appeared at her back door.

"She's gone, Mr. Brown," explained the woman. "Her folks came in early this morning, and took her and the children out to the country."

"Mr. Brown! Mr. Brown! The call-boy's after you. Says quick."

"O'Connell, wait a minute. Keep your ear there."

Bud went out and held a brief conference with the call-boy.

"Never mind, O'Connell; I won't use the rig. I've changed my mind. I'm not going."

In another half-hour Bud was in the cab of a passenger engine, and behind him was a single coach.

"You've got to turn her some, Bud," explained the conductor. "Everything's to be out of our way. We've got just two hours and ten minutes for one hundred and fifteen miles. Go to it, Bud. Twelve-thirty in the Union Depot at Chicago. That's the program, Bud."

Bud was in daredevil humor. Old Santa himself is supposed to have a reindeer fleetness that is some going; but, with all his years of training for this particular day, Bud left him far, far behind, until the mid-winter haze swallowed him up.

Bud pulled into the Union Depot a shade under the two hours, and the next day the papers published his picture.

A lone passenger got out of the coach. As he hurried outside the gate, Bud heard the joyous commotion of meeting.

"Hey, Bud!" said the conductor. "Here's a five-dollar gold piece. That fellow said to give it to you."

"What's all this excursion, anyway?" asked Bud.

"Why, that fellow come up from the South and missed his connections, and got marooned a hundred and fifteen miles from home. Says he's never missed a Christmas dinner with his wife and children. 'Christmas only comes once a year,' says he, 'and there won't be many years'; so, when he saw he couldn't do it any other way, he just hired this special train. Cost him about a hundred or a hundred and fifty. He's a sentimental sort of fellow. 'Think I'd disappoint them and me, too, for that?' he asked. Well, we landed him here, all right; didn't we, old scout?"

A little later, Bud was sitting on a high stool in a restaurant.

"Give me a hamburg sandwich and a cup of coffee! How's that mince pie—this month's or last? Say, for Christmas dinner you ought to have real cream for this coffee! Funny how these doughnuts turn to stone after thirty days, ain't it? These Chicago cockroaches are greedier than those down in Indiana. Over there, they let the patron break bread first. Here, they beat him to it."

"That's a fine Christmas grouch you got," grinned the waiter.

"There's a reason," growled Bud.

Molly is saving the gold piece. Some Christmas day, when the cards run right, it is to buy a Christmas dinner. And Bud is to carve the turkey.

There is a thriving little town in the West, on a certain railroad. Tom Dixon was sent there in the dual capacity as railroad and express agent.

About the same time, a very charming and sensible little girl arrived in this same place to teach in the public school.

Tom met her a number of times, and at once laid in some tailored clothes, six neckties of variant hues, and a change of hats. She cast a witching eye at Tom, and, in time, Tom held her hand.

Then Tom confided to a friend that a young man could not save any money gallivanting and pirouetting around in the folly of the single state, and that he could never amount to anything or get anywhere until he married and had the help of a good woman.

The friend assured Tom that was true.

That is one of the nice qualities of a close friendship. It can be depended upon to encourage and justify anything on which you set your heart. It has the pleasing quality of agreeing with you, and of taking your view, of concurring, assenting, and approving. That is the reason it is so stimulating to confide in a friend in moments of perplexity. The friend tells us what we want to hear, because we put the case to him in a way that brings an amiable concurrence.

But, in Tom's case, the friend was right. A young man of good intent, steady purpose, and sufficient income should marry a good girl.

There are twenty-five good and sufficient reasons.

First.

Well, anyway, Tom married the little "schoolmarm."

They got along well together. They saved a little money—not much, but a little.

The little girl schemed and managed, and they began to see their way to the points of sending for a bungalow book, and to notice fancy gables, contorted dormers, and pergolas.

Then Christmas Day was coming along, and Tom began wondering what he could buy her. He went over every page of the department-store catalogue. He inspected the china sets, and the cut glass, and aluminum outfits, silver tableware, and furs.

Tom reasoned it all out. She is such a sensible girl. No ornamental gew-gaws for Maggie. No foolish flubdubbery. Something useful every day for her. This brought him, at length, to the patent sweeper and the galvanized bread-mixer.

One day early in December, a little sealed package from Chicago came to Tom's office and into Tom's hands.

He startled a little to see that it was addressed to his wife, "Mrs. Tom Dixon," in a masculine hand.

It bore a conspicuous red-letter poster,

"Not to be delivered or opened until Christmas Day."

"What the thunder's this?" said Tom, turning it over and over. "Who would be sending Maggie anything from Chicago? Wonder whose handwriting that is?"

Tom inspected the package with the keenest perplexity. "Value, fifty dollars! Huh, I can't understand it!"

Tom put the package in the safe, but he got it out again, examined the seals, and slyly tried to pry one of them loose, but it held faithful to its trust.

Then he adroitly questioned his wife about her relatives and friends to find a clue to one whose interest in Maggie would indicate a Christmas value of fifty dollars, with barren results, until one day—a-ha!—a woman cannot keep anything. One day she let out a little—not much, but enough. Tom, quick-eared and nimble-witted, put this and that together, and guessed the rest.

There was a young man, a dear friend, with whom Maggie had gone to school. He was now in Chicago. It was a childish romance—almost forgotten. He was prospering, and—

Tom walked back to the office very erect, looked hard ahead and clutched his fists.

"That fellow knows Maggie's married, because he used my name in addressing that package," he muttered. "If that snipe goes to butting in on my preserves, there'll be some doings." He swelled with indignation. "That parasite never thought that anything expressed to my wife would pass through my hands. I don't blame Maggie, but she's a woman, and these little attentions would please her, and will revive friendships that can't do any one any good. But good fortune has placed the matter before me, and it's up to me to nip the affair in the bud."

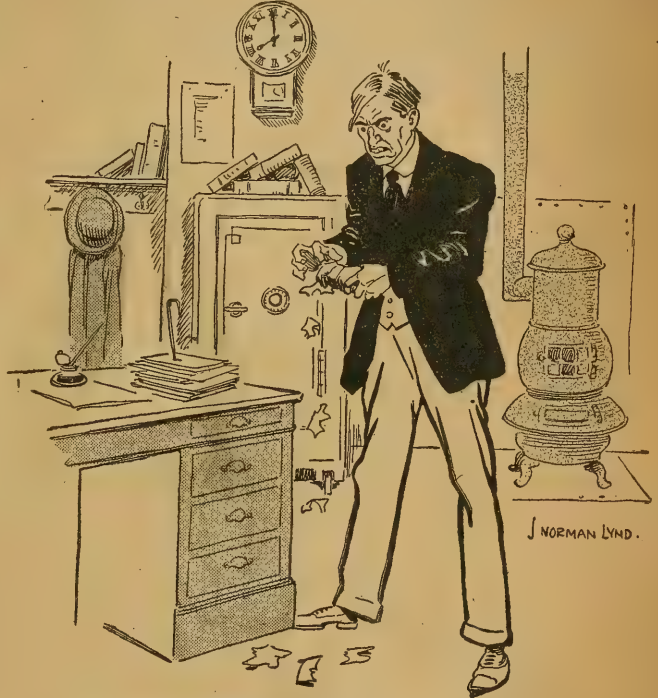
Tom once more took the little package out of the safe. He had turned it over so many times that the edges were soiled.

This time, burning with a curiosity that could no longer be restrained, and impelled

by a fierce conviction of duty, the sharp blade of Tom's office-knife lifted the seals and the outer wrapper was removed.

This revealed another package, similarly sealed and on which was written:

The seals on this package cannot be restored. If from some unworthy curiosity any meddler should pry into it, his telltale marks will be left.



BEFORE HIM WERE VISIONS OF OPALS, AMETHYSTS, AND RUBIES.

Nevertheless, Tom removed this, and found a third, on which was written:

The contents within this little box are only for the eyes of Mrs. Dixon, and are to be seen by no one else.

Tom clutched it almost savagely and tore it open.

He hardly knew what to expect, but before him were fierce visions of opals, amethysts, and rubies.

He found nothing but a carefully-folded little note that fell to the floor.

Tom picked it up, smoothed it out, and read with a half-aloud eagerness:

This is the most foolish letter ever written. It is written by a foolish girl, but it will never be read by any one but the same foolish girl who wrote it, and will be read by her

Christmas Day to remind her how vain and foolish she is. From childhood she has wanted a diamond ring. They told her she had pretty fingers, and she thought, foolish, little girl, how pretty a diamond ring would look on one of them. But she could never buy it, and there was no one else that knew.

Men do not understand how some simple little fancy tugs at a woman's heart—some vagary—some little humor or conceit which she never outgrows and which is never gratified or satisfied. I could not tell this to Tom. Poor boy, he works so hard, and denies himself so many things, and we manage so closely to get along to have a little to put away.

package alone. I'm a chump and a fool. I lost my head. Suspicious of—hang it! I can't get that package together again. She'll know I pried it open. Maybe I could burn the depot or blow up the safe, and save myself by making away with it in that way. Why didn't I have gumption enough to keep my fingers off?"

Tom thought a long while—but there was only one way out.

He deliberately gathered up the torn remains and stuck them into the fire.



"YOU HAVE SUCH COLD FEET, YOU KNOW, TOM."

This letter is written by the foolish little girl to remind her, that on the day when gifts are given and the fancy comes back the strongest, that she is to forget for all time that her fingers are pretty—that there are such things as diamond rings, and that empty show and vanity are not for the wife of as good a husband as Tom.

That was all.

Tom got up and stood with his back to the stove and his hands behind him.

"I reckon I'm a durned chump."

Then he paused.

"I wish I'd had sense enough to let that

The "not-to-be-opened-until-Christmas" package went up in one brief exultant roar.

Then he got out the jeweler's catalogue that had found its way in the express office, and turned to diamond rings.

Any railroad man with regular employment can purchase a diamond ring on the same terms as a typewriter—five down and so much per month until paid. Tom approached the proposition from that angle.

"By the way, Maggie," said Tom unconcernedly one day, "I got a small express package for you from Chicago."

"For me!" exclaimed Maggie, opening wide her innocent eyes.

"It's sealed and marked valuable and has a label on it, 'Do not open until Christmas.' I'd better keep it till then in the office safe. Women are mighty curious, and I don't believe you could keep it in the house without breaking the seal and taking a peep at the inside."

"I am so curious, Tom; I wonder who would send me anything. What does it look like?"

"Oh, it looks like it might contain a couple dozen sticks of chewing-gum, and maybe there's a tin stick-pin with a window-glass setting for me," said Tom with careless levity.

"Tom, have you opened it?"

"Opened a package addressed to you and plainly marked, 'Do not open until Christmas?' Maggie, do you think I am that mean?"

"Of course not," said Maggie; "but I am so curious, Tom. Maybe it had better be kept in the safe until Christmas. I will be guessing every minute. You must keep it at the office, Tom. You are strong, and I am weak. I don't believe I could resist the temptation, but you must understand one thing, Tom Dixon," smiled Maggie, "you are under suspicion all the time."

"It's not my doings," said Tom soberly.

"Tom, look me in the eye."

"That's straight, Maggie."

Every day Maggie plied him with eager questions; and Tom, with a sort of languid interest, assured her the gift was safe and undisturbed.

Christmas morning came, and Maggie with tense fingers tore the seals and found a diamond ring.

"Oh, Tom," she cried with hysterical joy, "you should not have done this for me! It's so kind and so nice of you, Tom; but we can't afford it. We can't, indeed."

"I've wanted a diamond ring ever since I was a little girl, but I never let you know how I yearned for one—did I, Tom? What a mind-reader you are, Tom! It has always been my one weakness—a dia-

mond ring. I never told any one, Tom; only Mrs. Hatch, the language teacher. She knows. I talked to her about it many times. I roomed with her, you know. She is such a clever woman.

"Isn't it funny, Tom? Last month a bunch of us girls were at her home, and she told our fortunes. She held my hand and said: 'What pretty fingers! Christmas Day you will receive a diamond ring from your husband.'"

"It has come true. She said it would. She held communion with the ginx, and they told her there was a way and to leave it to her. 'I never tell fortunes, little girl,' she said, 'that do not come true.' Mrs. Hatch is such a very, very clever woman, Tom, there isn't anything that would please me more. Tom Dixon, I'll bet Mrs. Hatch put you up to this."

"Mrs. Hatch!" gasped Tom. "Did she wri— Oh, hang Mrs. Hatch! I'm mighty glad you're pleased, Maggie—there's nothing too good for you."

The clever Mrs. Hatch! Clever, indeed, in thus putting one over on Tom!

Tom preserved a sheepish silence. Mrs. Hatch was immensely delighted that Maggie had a diamond ring—and Maggie doesn't know the rest of it.

"Now, see what I have for you, Tom!" exclaimed Maggie. "Two pairs of socks of soft saxony yarn. I knit them myself. They will be so much warmer than those you buy. You have such cold feet, you know, Tom."

Tom sat in his office. It was near the close of Christmas Day.

His feet were on his desk, and he smoked a cigar in a leisurely meditative way. Between his shoe-tops and his pants' bottoms there was a startling exposure of saxony yarn—and there was more circumference in one ankle than the other, for she "knit them herself."

"Talk about women voting," said Tom, thumping the ashes from his cigar. "They ought to be in politics. When it comes to turning tricks a woman can give a man every card in the deck and beat him out."

Most men use their energy for the day's work, but some careful souls save it all for the sprint to the pay-car. Do you?—

Growls of the Gang Boss.

Bill Nye's Appeal for a Pass.

BILL NYE, of the *Boomerang*, is publishing a Complete Letter Writer in serial form. In a recent issue he says:

Our first letter will be in the form that should be used in addressing a soulless corporation relative to a pass:

OFFICE OF FREEDOM'S BUGLE HORN,
WAHOO, NEB., February 22, 1882.

TO HON. J. Q. A. GALL, GENERAL PASSENGER
AND TICKET AGENT, J. I. M. C. R. O. W. RY.,
CHICAGO, ILL.:

DEAR SIR—Unfortunately you have never experienced the glad thrill and holy joy of my acquaintance.

You have groped through the long and dreary heretofore without that solemn gladness that you might have enjoyed had Providence thrown you in the golden sunlight of my smile.

I have addressed you at this moment for the purpose of ascertaining your mental convictions relative to an annual pass over your voluptuous line. The *Bugle Horn* being only a semi-annual, you will probably have some little reservation about issuing an annual on the strength of it.

This, however, is a fatal error on your part.

It is true that this literary blood-searcher and kidney-polisher, if I may be allowed that chaste and eccentric expression, does not occur very often, but when it does shoot athwart the journalistic horizon, error and cock-eyed ignorance begin to yearn for tall grass.

You will readily see how it is in my power to throw your road into the hands of a receiver in a few days. It will occur to you instantly that, with the enormous power in my hands, something should be done at once to muzzle and subsidize me. The *Bugle Horn* stands upon the pinnacle of pure and untarnished independence. Her clarion notes are ever heard above the din of war and in favor of the poor, the down-trodden, and the oppressed. Still, it is my solemn duty to foster and encourage a few poor and deserving monopolies.

I have already taken your road and, so to speak, placed it on its feet. Time and again I have closed my eyes to unpleasant facts relative to your line, because I did not wish to crush a young and growing industry. I can point to many instances where hot-boxes and other outrages upon the traveling public have been ignored by me and allowed to pass by.

Last fall you had a washout at Jimtown which was criminally inexcusable in its character, but I passed silently over the occurrence in order that you might redeem yourself. One of your conductors, an over-grown, bald-headed pelican from Laramie, a man of no literary ability, and who could not write a poem to save his soul from perdition, once started the train out of Wahoo when I was within $\frac{1}{4}$ of a mile of the depot and left

me gazing thoughtfully down the track with a one-hundred-and-fifty-pound trunk to carry back home with me.

What did I do? Did I go to the telegraph-office and wire you to stop the train and kill the conductor with a coal-pick? Did I cut short his unprofitable life and ruin the road with my cruel pen? No, sir.

I hushed the matter up. I kept it out of the papers as far as possible in order that your soulless corporation might have a new lease of life.

Another time, when my pass and purse had expired at about the same time and I undertook to travel on my voluptuous shape, a red-headed conductor whose soul had never walked upon the sunlit hills of potent genius, caught me by the bosom of my pants and forcibly ejected me from the train while it was in motion, and with such vigor and enthusiasm that I rolled down an embankment one hundred feet with frightful rapidity and loss of life.

A large bottle of tansy and sweet spirits hear my prayer, which I had concealed about my person to keep off malaria and rattlesnakes, was frightfully crushed and segregated. Besides this my feelings were hurt and outraged, and so was the portico of my pantaloons.

Others would have burned down a water-tank, or dusted off the crossing with the mangled corpse of the general passenger-agent, but I did not. I bound up my bleeding heart, and walked home beneath the cold stars and forgave the cruel wrong.

I now ask you whether in view of this you will or will not stand in the pathway of your company's success. Will you refuse me a pass and call down upon yourself the avalanche of my burning wrath, or will you grant me an annual, and open up such an era of prosperity for the J. I. M. C. R. O. W. Railway as it never before knew.

Do you want the aid and encouragement of the *Bugle Horn* and success, or do you want its opposition and a pauper's grave beneath the blue-eyed johnny-jump-ups in the valley?

Ostensibly I am independent and fearless, but if you are looking around for a journal to subsidize, do not forget the number of my post-office box. I have made and unmade several railroads already, and it makes me shudder to think of the horrible fate which awaits you if you hold your nose too high and stiffen your official neck.

Should you enclose the pass I would be very grateful to you for any little suggestions during the year as to what my fearless and outspoken opinion should be relative to your company.

Hoping to hear from you favorably in the contiguous ultimately, I beg leave to wish you a very pleasant *bon vivant*. Very sincerely yours,

EPHRAIM BATES,
Molder of Public Sentiment.
—From an Old Scrap Book.

JETHRA RIKER'S NEW YEAR.

BY ROBERT FULKERSON HOFFMAN.

Another Year Comes Jubilantly Sounding to the
Caboose and Wakens Memories of Another Day.!



UNCLE JETHRA RIKER, ruddy of face, white of beard and hair, weary guardian of his own cattle rumbling on ahead, sat dozing peacefully, with his rickety armchair tipped back rakishly against the rear wall of the caboose. Conductor Spangler, under the sidelight at his desk, silently checked his brief list of red-ball freight, and high in the cupola sat the flagman, watching ahead the pulsing, endless struggle of a little light against a mighty, ever-closing darkness.

Above the vibrant silence of the caboose, engulfing it, making it actively alive, there came suddenly a low moaning from the front. Mingling with the distant, thunderous roll of the engine's exhaust, it mounted quickly into a bubbling, rollicking succession of giant shoutings that went hurtling away across the dim snow-fields. Chuckling and gurgling echoes came rolling back from the icy mountainheads to join in a jubilant shriek that chattered the frosted window-panes of the caboose in their fastenings. Uncle Jethra's chair squared itself with a thud upon the floor, and he stood bolt upright in the shocked strength of his rugged six-foot-two.

"What's that?" he demanded, reaching hastily for his discarded hat. "Do you suppose there's anything wrong with them cattle?"

As though for answer, two last, high blasts from the engine-whistle came rolling back, and the cannonade of exhausts from the stack boomed steadily out into the night.

"That," said Spangler, turning from his finished work and calmly consulting his watch, "is 'Coon' Connor's way of an-

nouncing that we have just crossed the line into the new year. Sit down and be happy, uncle. Happy day!"

Without answer, Riker turned to the rear door of the caboose and threw it wide to let in a brief sweep of the clean, frosty air. With the red light from the rear platform flooding his face with its soft glow from below, the crinkles deepened at the corners of his quizzical eyes. Until he had wholly recovered from the quick fear for his cattle he stood looking far out into the night, as one might fancy a sturdy old Norseman gazing across a darkened sea of ice. With a great, glad breath of the clear air, he closed the door, and sat again, saying:

"Yes, so it is. Happy day! I ought to remember. I was in jail once on New Year's. Did you ever start out with your whole bein' filled to overflow with good intentions, and fetch up in jail—on New Year's?"

"Not since I've been on this run, uncle, I swear it!" replied Spangler, with a smile that seemed to be reflected from the old man's face.

"Me nuther," said Riker, "but I used to run my cattle to Chicago 'stead of El Paso only, and that's some different. You see," he continued, filling his pipe and passing the pouch to Spangler, "I'd been living in Texas thirty years and been homesick, in a way, all that time—if you can rightly sense that. Went out a poor boy from the bitter early days of a Wabash River farm, took root down there, and got to be the father of men children and owner of a thousand acres, same as now, without ever going back to where I'd come from.

"So it come one more winter when I had cattle needing market, and I headed

them for Chicago, meaning to go on around by the Wabash coming back. There was seeming good reasons why I'd never gone before, but there's two things that was always calling to me to come back.

"One was the rustle of leaves on a big sycamore that stood on a knoll by the Wabash and shadowed the quiet spot where my mother had slept long as I could remember. I had dreamed my lonely boy-dreams there in rare idle minutes, and I wanted to stand there again and sort of sum up what of them had come true.

"The other was the side-porch of Homer Allen's store, where Mrs. Allen used to mother me some when I'd drove in with a load of farm-stuff, and her little tike of a boy, Lincoln, used to climb all over me and hug me and make me cry for the sheer loneliness of what I'd just come from. I wanted to see that boy—boy or man.

"So, I left home with the cattle soon after Christmas. All went fine, and day before New Year's I cashed them in at Chicago for forty-seven hundred dollars, and left the yards with a nice-seeming fellow who said he's from Kansas. We rid into the city together, and had a real enjoyable talk.

"He told me a lot about his folks, and I told him some about mine. Seems he's got more folks than me, so I tells him some about my neighbor Crockett, to fill in like, and how I'm to look up Hallie Crockett, who's been doing well in Chicago for a spell back, and get a first-hand word for her people.

"I left the fellow in the station, and I'm over in Jackson Street, aiming to get me a ticket, hunt up Hallie, and land me on the Wabash next day for New Year's. I'm set on that last, most of all, and not looking out as sharp as I might in such a crowded runway, when there's a shortish, smooth-looking fellow of mebbe thirty-eight years bumps me half off the sidewalk, going in the same direction.

"It riled me, and I turned, meaning to bat him across the ears, same as you'd bat an unruly yearling calf. But a square sight of him changed me a mite, and what he said done more.

"Never mind. You listen," Uncle Riker interrupted himself to say, with a wide sweep of the hand.

Spangler's meaningful laugh had nettled him.

"That young man was togged out in a long cape-overcoat, shiny black boots, and

a plug hat. His face was round and putty-white, with close-lidded eyes, like a turtle that's watching you to see whether it'll best drop into the swamp or stay on the top side of the log.

"It wasn't a good face, you'll notice, and what's more, when he swept back the right wing of his cape and shoved out his hand to shake, I see a tuberose in his buttonhole, and got the smell of it.

"Now, there's only two kinds of men that'll wear a tuberose in their buttonhole, fur as I know—that's men that's already dead, and men that ought to be. Knowing that, I looked at him in sort of wondering disgust 'stead of batting him, as I should have done, and that give him a chance to talk.

"Pardon me, sir," he says, polite as Mexicans—"pardon me, sir. I—why, upon my soul! I believe it is—"

"Yes," I says, "it is. You read my earmarks O.K. first gallop through the herd, but it don't happen to be your brand, I reckon. Now, supposin' you git over to your side of the line and I git to mine."

"I stunned the fellow a mite with that, and was turning on my way, when he broke out with a fresh brand of apologies and wound up with a pleading look and: 'You are Mr. Riker, aren't you? Much as you have changed for the better, I knew you in an instant.'

"Now, that sort of got me, and I was mushy enough to say: 'Yes, I be. Who are you to tell me about it?'

"Do you remember a little boy that used to climb on your knee on Allen's side porch," says he, "and how you used to set there with your blue overalls on and your whiskers just beginning to grow long enough for the boy to pull one at a time? How you used to laugh and sometimes cry there?'

"I do," says I.

"Well," says the fellow, "I'm that little boy. I'm Lincoln Allen."

"I ain't going to tell you all else he told me, but that man told me things that I thought nobody but myself knew. He even told me about the big sycamore, and how the water sounds washing along by the grass-mound bank. He told me about the white stone that stands under the sycamore, and named, word for word, the verse of scripture that's writ on it.

"And all the time he's walking along with me till I've most forgive him his face and the tuberose, and come to believe that

he's little Linc' Allen grown up to be the kind of man he said he was. Oh, yes! He's a business man—very busy, indeed—and just when we're a block or two away from where he bumped into me, a young fellow came running up the sidewalk to meet him.

"This young fellow is wearing a black skull-cap of silk, or alpaca, or the like, and has his hands full of memorandum and pencil stuff—all business and excitement. He apologizes to me for the interruption, and then states his case quick about some rush calls on sight drafts just come into the office. Three hundred dollars he must have, and have it quick.

"Lincoln Allen,' as we'll call him, didn't hesitate a minute. He reached under his cape coat and hauled out a buckskin sack of hard money, handed it to the clerk, and told him to take out what he needed. The clerk counted out what looked to be three hundred dollars in gold, and handed the sack back. Little Lincoln restored the sack to his inner pocket, and despatched the clerk upon his way.

"The young fellow had run as much as ten steps when Allen called him back.

"That's bad business,' he says, 'come to think of it. There's a premium on gold just now. We ought to have the advantage of it, 'stead of letting it go to our correspondents. Mr. Riker, could you possibly accommodate me with bills or silver for the amount and take this gold until we can walk round to the bank and exchange it?'

"Now, I ain't making any argyment to jestify my doings," Uncle Riker again interrupted himself to say, as Spangler showed signs of another sardonic eruption. "I'm stating the bare facts of what I done.

"When the clerk chinks them fifteen twenty-dollar gold pieces back into Lincoln's right hand, and Lincoln turns offering them to me, right here, thinks I, is where Archie really kills the bear, if it ain't little Lincoln; and if it is Lincoln—

"I thought of how Mrs. Allen give me pie and things when I sot on her porch, and about Lincoln's dancing blue eyes that now looked a sort of dirty mouse-gray, somehow, as I searched his face for some brand I'd reco'nize.

"I thought about the forty-seven hundred in my inside pocket, and stepped a little one side into the angle of a building and set my satchel down.

"I dug down into my jeans and pulled out three one-hundred-dollar bills that I'd had left before I sold the cattle, and I handed them to Lincoln and took the gold. He handed them to the clerk, and stooped to pick up my satchel, while I still held the gold in my hand.

"But something told me on the second to beat him to it. I grabbed up the satchel with my other hand, and the minute I straightened up with my both hands full it seemed like I got my full sense of heft, and I see what had been done to me. The clerk was gone in the crowd of the walk.

"Here,' I says without no frills, and letting the gold pieces skitter back into Lincoln's hand—all but one piece, which I palmed under my thumb and later slipped into my vest-pocket—'I don't want this stuff. It's light.'

"You astonish me, Mr. Riker!' says Lincoln.

"I reckon I do,' says I. 'And before it strikes in too deep I'll ask you to hand over three hundred dollars in good money, or take the consequences right here.'

"Why, certainly, certainly—if you prefer it. Why, my dear Mr. Riker, that's the whole idee; I want the gold, you know, and if you'll just walk around to the bank with me we'll close up the whole deal in a jiffy! Why, certainly, certainly!'

"We went. When we got to the bank doors, a block or two away, he led in between the big stone columns of the entrance, stepped at a good road-gait through the swinging doors, and smashed that heavy, flapping door back in my face, with me on the outside. It jarred me a lot.

"Then, too, when I was leaving home, mother and the boys kept coaxing at me to wear Jed's derby hat, that jest fits me, and I'm that silly and vain that I done it. When the door hit me it bashed my face some and staggered me backward while that fool hat went bouncing around on the ground like a sand-flea tetchted with sunstroke.

"By the time I'd corraled it and straightened up, there's two or three oily looking gents standing between me and the bank door, and they're crowding round and asking am I hurt, am I hurt?

"Oh, they was anxious all right—just that anxious that I breshed 'em all aside with one sweep and said: 'You mind your own business.'

"I knowed by then that if I was to win back I'd got to play my own game, and play

it straight in my own way. So I walks right in, and up the long, shady chute, to the desk. Lincoln, of course, is nowheres in sight. I set my satchel down, and I says to the clean-looking young fellow behind the brass grating: 'What bank is this, son?'

"'Bank?' says he, real civil. 'Not a bank, sir—this is the Grand Pacific Hotel. What can we do for you?'

"'Oh,' I says, 'that's it, eh? Well, I ain't to say rightly acquainted with this part of town. I work my cattle mostly straight between the Transit House and home.'

"'Yes?' he says. 'And what can we do for you, sir?'

"'Well,' I says, 'is the proprietor in?'

"'N-o-o,' says the young fellow, kind of doubtful, 'but you can talk to me till he comes, if you like.'

"'I've lost my money,' says I. And I set out to tell him the whole right of it fair and open.

"'I'd only got a little piece when he spoke up soft and polite as he spoke all along.

"'Frank!' he says.

"'Frank?' I says, not rightly catching his meaning.

"'We don't breed any such plays as that in this house,' he answers, 'and we don't stand for it. Frank, this is Mr.—'

"'Riker,' I supplies, soon as I'd took a good square look into the eyes of a stocky fellow that's pressing just the least bit against my off-elbow.

"'There's nobody there the second before, but he's got something of the same look about him that my oldest boy, Jed, carries, and I know in a second that he's all right.

"'Yes, Mr. Riker. Frank, Mr. Riker is our guest for the present, and you will entertain him. Just sit down over yonder and tell Frank all about it, won't you, Mr. Riker?' says the clerk.

"'I reached right over to that young man and took the pen from his hand. I registered my name and brand, same as I'd do at the Transit House, sealed up my forty-seven hundred dollars in an envelope and took a receipt for it, passed in my satchel and the whole kit, and went over in a shady corner and sot down with Frank, without a cent in my pocket.

"'We got along fine. I told him the whole works—about the fellow that was going back to Ohio to see his folks, and all. When it come to me describing Lincoln, it was jest like we was a pair of kids playing a game.

"'Silk hat,' says I.

"'Topper,' says Frank, jotting it down on a tally-pad.

"'Putty-face,' says I.

"'Poker-mug,' says Frank.

"'And so it went:

"'Turtle eyes.'

"'Blinker.'

"'Cape coat.'

"'Curtain.'

"'Right-handed.'

"'One wing.'

"'Frank's smiling broader and broader as the game goes on, till I says:

"'Mebbe ain't got no left hand. Never showed it.'

"'Five-finger Hannigan!' says Frank, laughing ready to bust, and jotting it down. 'That's the answer. Uncle, you're all right. If you ever want my kind of a job, come again, and we'll fix you up. Now, you jest set here till I come back, and don't you stir. I won't be gone long.'

"'He went, and I sot there quite a long spell before it got so I had to either git up and hustle round a mite, or set up the long yell jest to know I was still alive. I moseyed toward the Clark Street door, and the clerk shook his head at me. But I waved my hand at him so he smiled, and I went on.

"'I'd no more'n got my nose out the door than there's a nasty, spiteful little gun-crack snaps out up the street some'eres, and the coveys of moving people on both sides of the street fluttered for cover behind the line of cabs that's standing along the curb, over along the old Government Building.

"'Ever hear a gun crack in a crowded street? It's a mighty sassy sound! That street was nigh about empty in two winks, and down my side come Lincoln Allen, tearing along, minus his plug hat and his cape coat, but wearing his tuberoso plain as a tin star on a depety marshal, while he looks back'ard and makes motions with something glinting in his right hand. He ain't got no other hand. It's off at the wrist, and the stump's waving as he runs.

"'Close as he dares comes Frank chasing behind him, dodging in and out among cabs in the gutter with a big gun in his hand, but trying to draw Lincoln's last slug before he closes in on him right.

"'Lincoln's got one of them dirty little two-barrel affairs, you see, that shoots a soft-nose slug and can be hid in your palm, and he's got rid of one shot, as I reckon it. So, I see it's plain up to me.

"Jest as he come abreast of the big stone pillars I'm standing behind, I hops out and corrals him. He proves he's an outlaw, all right, for he twists that dinky little gun up alongside my face and blows the roof out of Jed's derby slick as anything you ever see, and hung onto the gun while I downed him.

"Then he turned a reg'lar branding-pen trick on me by gitting his hind feet fair under me while he laid and fought on his back, and he tossed me up surprising, once or twice.

"But, after I'd bashed him one or two about the same size that the swing-door give me, and twisted the gun out of his hand, he was that biting with his cussing that I jammed that little four-inch gun crossways into his mouth and squshed it shet heavy enough to stick. When I'd got done hog-tying him, feet and right hand, letting his short wing flutter for luck, I looked up and seen Frank standing over me in the rim of the crowd that had closed in, and he's laughing ready to drop.

"Uncle," he says, "you're sure all right. I don't mind telling you now that I was born in Texas. Lay still, Hannigan! The wagon'll be here in a minute. What do you think of the Texas game, huh?"

"Ever been in that annex o' perdition that they call Harrison Street Station—down cellar? There's nothing like it nor approaching it down our way, barring the bear-pit in the abandoned zoological works that Texeden started in its boom days. Lem Baxter uses it now as headquarters for a skunk farm, and does his killing and pelt-drying inside the spike-iron fence at the pit-mouth. But that's clean and fresh.

"There's where we fetched up—Harrison Street jail. Me as a witness, and Lincoln because he'd never been hung. They wanted me to give bail for my appearance as complainant, but I wasn't seeing my way clear to let go of anything more in that bunch. I looked Frank fair in the eye, and told the desk marshal I hadn't a peso on me and didn't know when I would have. Frank stood pat.

"Well," says the fellow, "there's nothing to do, then, but hold you until we can get a hearing."

"I'll play my hand," says I.

"Take him down," says the fellow, and I followed the lead till he opened a boiler-plate door at the foot of the stairs.

"Say, Spangler, the smell that come up

out of there—well, let that go. There's a nigger down in there somewheres, drunk and yelling: 'She's ah loaded with bright angels, hallelu-yah! She's ah loaded—'

"The nigger broke off with a strangling yell, and every coyote in the den set up a ki-yi till it was like—well, like that. There ain't nothing else like it.

"I poked my head inside the door in time to see one of the depeties shut off an inch-and-a-quarter stream from a nozzle that he'd turned on him. And as soon as the nigger got done choking and swearing he changed his tune to 'Ah-roll, ol' Jurdun, ah-roll!'

"I backed out onto the lower step, and told the depety that was leading me if he aimed to corral me in such a den o' varmints as that, I'd do my best to rip the internals out of the whole works. With what I said and what Frank said between sort of snickering behind me, it comes that they let me stay up-stairs with the reserves.

"And there I am—spang and good in jail next morning, for New Year's, 'stead of down on the Wabash, as I'd aimed to be.

"First hearing, next day, yields up a continuance. Change of venue to a court seven miles over on the west side. Harrison Street calendar crowded.

"Second hearing, three days gone, assays a continuance of five days and change to North Halstead Street—round trip, fifteen miles.

"Third hearing pans out continuance—four days, and changed to a court in Cottage Grove Avenue, seven miles southeast; round trip, fourteen miles.

"Course you see what fur, Spangler; but I was there every trip, and still going, when there's some kind o' rumpus breaks out one day a little piece down the street from the Harrison Street honkatonk, and I slipped out the door and took a look.

"Just around the next corner there's a young boy throwing a fit on the sidewalk. He's wallering in the slime on the stones and rising to his feet and falling his length as fast as he can rise and tumble. He's frothing at the mouth and going on that bad that it would make you plumb sad. The big marshal that's standing over him ain't doing a thing to help him, and I sort o' steps in.

"But there's a decent-looking old man grabs me by the arm and pulls me aside. 'Don't,' he says. 'The cop'd kill ye!'

"He hung on till he'd drawn me round the corner, and I'm a maverick if that old

rascal hadn't offered me a mangy hundred dollars inside of two minutes if I'd pull my freight and let up on Lincoln Allen. I never answered him, I'm that disgusted, and I went straight back to jail.

"Next day come the fourth hearing, an' it's in a place near by. 'There's a good-faced young fellow for judge. He's setting high and alone when we go in, and just below him, with her back to us, sets a young woman scratching down court notes. She turns and looks at us when they've all finished something. Then she lets out a little choky squawk, and comes bounding to the top of the low, flat-top railing, just like she used to hop into a box-stirrup onto her pony, and she landed fair with her arms around my neck.

"Why, Uncle Jethra Riker!" she says right out loud. 'You frightened me nearly to death. Where did you come from?'

"Jail," I says, 'Hallie, jail. But gentle now. It's all right.'

"Yes, it's Hallie Crockett, all right. And while the court folks is getting things quieted down, the judge picks up the papers in our case and looks them over a whole lot, noting how we been swinging round the circle, I reckon, from what happens after.

"Spangler, I've seen some quick deals—San Antone and way stations—but nothing swifter than what follows. He calls the hull caboodle of us inside the rail—Lincoln, cappers, coppers, Frank, and me.

"Mr. Riker," he says, 'do you remember a little boy that—'

"Well, that made me hot. He didn't look like one o' the gang, and it was disgusting to have it pan out that way again.

"I broke right in.

"Judge," I says, 'if you'll excuse liberties, I been through all that and a heap more. All I got out of it so fur is three weeks in jail and this brass simoleon.' I walked up and slapped the bogus twenty down hard on his desk.

"If your honor don't mind," I says, 'I'd be plumb happy to know whether this here's jest another sign-camp or do we have the final round-up right here?'

"He hefted that nasty 'gold,' and clinked it on the oak while he looked all of us over, savage as wolves.

"Final round-up," he says. 'Officer, I will see all parties to this suit at once in my chambers.'

"Well, the things he said to that bunch in there shriveled 'em till you could see the

wrinkles dropping off their horns. He finished up on Lincoln.

"Hannigan," he says, 'I've sent you down to Joliet until I'd be ashamed to make out another commitment. And you're all ways out soon. We understand the why. Too bad, but we understand. This time you played me in, to win against my old friend, Jethra Riker—but you overplayed your hand. The Federal court—'

"I was setting straight up, clutching my hair by then, Spangler. See where the trail's leading to? Sure as ever you held up a hobo for a two-bit ride on a freight-truck, that judge is Lincoln Allen.

"The Federal court," he goes on, cool as spring-water, 'has jurisdiction in this little "gold" affair. It is now eleven o'clock. I shall not send this "coin" to Commissioner Flint before two this afternoon. If you are inside his district at that time—I think you know the rest. The other is a minor matter, between you and Mr. Riker, we'll say, for the present.

"Jethy," he says, wringing my hand on his way back to the bench, 'stop and talk a moment on your way out. Glad to see you.'

"Lincoln," I says to Hannigan, when the judge is gone, 'Lincoln—'

"Aw, cut that!" says Hannigan, none polite now.

"There's good authority," I says, 'fer saying that if you slap a man on one cheek—with an oak door—it's liable to come back to you a hundredfold. But, fer old time's sake, if you and your gang will raise that Harrison Street soap-fit ante about to the tenth magnitude, we can deal right here.'

"With no more said, there's a crisp thousand-dollar bill comes fluttering down on the table from somewheres in the gang, gentle as the drop of a leaf from the old sycamore, and it's all over.

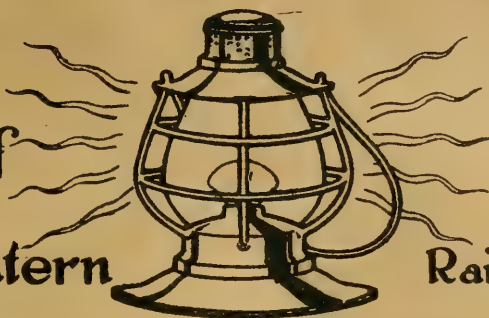
"Next day I'm standing under that bleak old tree on the Wabash, and, passing that, I never stop going till I'm back in Texas.

"When we found out from the Crocketts just how things stood we asked Judge Allen to come down, after the ceremony, and bring Hallie to see next June grass on the Brazos. He done it!"

With a yawn of deep content, Uncle Jethra stretched his long arms high into the cupola before rolling into the lower bunk of the caboose to sleep the sleep of the just and unvanquished, until Coon Connor tore the winter dawn to tatters with his New Year's greeting for sleeping Del Sur.

WHAT'S THE ANSWER?

By the
Light of
the Lantern



Questions
Answered
for
Railroad Men

ASK US!

WEB like to be as useful to our readers as we can; but, because of the great popularity of this department, we are forced to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature only. Letters concerning positions **WILL NOT** be answered in this department. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials.

WHAT is the controlled manual block system, and how is it operated?—C. F. W., Boston.

It is a system through which the starting signal for a train to enter a block is released by the operator at the extreme end of that block—in fact, by the operator in the tower where the next block starts—and this release cannot be effected if the block is occupied by a train, if a switch is open, or if a rail is broken. For a complete description of this and other block systems, see the article, "The Working of Block Signals," in *THE RAILROAD MAN'S MAGAZINE*, for November, 1907. It would be impossible to do this interesting subject full justice within the limited confines of this department.

E. H. L., Pittsburgh.—We have delayed replying to your interesting train-order problem longer than we should, due to a vigorous attempt on our part to secure a decided expression of opinion from some authority. This, however, has not been forthcoming, but the general view of it is that the dispatcher could run the special as second "304" from "GU" to the junction of the spur track on which regular "304" was at that time operating, and run him as first "304" thence to Margo. This may not seem in accordance with the provisions of your question, in which

you state that the dispatcher does not ordinarily hear from regular "304" until she reaches Margo, but is it likely that they would be allowed such latitude? You say that at the junction of all the coal branches on which "304" has to work, there is a telephone, and would it not be more consistent railroading for them to notify the dispatcher before backing out of the branch and receive his permission?

If this rule was in vogue, it would be quite easy to run the special as we suggested, and annulled on the coal branches. If no means whatever existed to communicate with "304," it would appear that the special could not start until "304" reported from Margo.

We are not surprised when you say that this had some "good ones" up in the air. It had us there, too, for a time, and we can not say for a certainty whether we are down or not until we hear from you again. If you will let us know just how this matter was handled, we will be glad to publish your original letter in full, as it is very interesting.

CAN you tell us how a fireman came to be called a "tallow-pot," and an engineer a "hoghead"?—H. E. W., and E. J. G., Grand Island, Nebraska.

No, we cannot; that is, not in a way which

would give you or ourselves the assurance of correctness. The only explanation we ever heard for the two terms was that in the old days when locomotives were lubricated by an oil-cup on each steam-chest, it was the duty of the fireman to fill it from the tallow-pot when required, and some times he had this to do when the locomotive was in motion. The name has also been applied as frequently to engineers. In regard to the "hog-head," freight locomotives were usually termed "hogs" irrespective of design or weight, thus you may infer that an engineer might easily receive this nickname. Maybe there is a better explanation of the origin of the two names. If so, will some of our friends please write us?

F. M., Hoboken, New Jersey.—In regard to your question concerning the longest bridge in the world which we answered in a previous number, we have now unearthed another which is going to be hard to beat. This bridge is on the Norfolk and Southern Railroad across Albemarle Sound in North Carolina. It was started in March, 1909, and on January 10, 1910, trains were run across. It is 12 feet 6 inches from the surface of the water, and is five and seven-tenths miles long. It has two draws, one lift, and one turn bridge, the former being 147 feet in the clear. These figures were furnished by one who was employed on this work, and no doubt are correct.

R. G., Mount Vernon, New York.—The trolley system particularly appealed on the road you mention through the elimination of danger from the third rail, and there are also compelling arguments from the standpoint of maintenance and general operation in its favor, now that the troubles have been corrected which were so much in evidence when the line was first installed. There has never been any trouble to the wires arising from wind-storms, and breaks are quickly repaired. It makes no difference in the voltage whether the current goes through a trolley-wire or through the third rail. It is stepped down to what is required by transformers in the locomotive before reaching the motors.

W. C. H., High Point, Texas.—(1) The division superintendents of the Southern Pacific Company (Pacific System) are: Thomas Ahern, San Francisco, California; W. H. Averell, Los Angeles, California; J. H. Dyer, Dunsmuir, California; H. W. Sheridan, Sacramento, California; W. H. Whalen, Tucson, Arizona; W. A. Whitney, Oakland Pier, California; and F. M. Worthington, Bakersfield, California. We are without information regarding the total engine changes between El Paso and San Francisco.

(2) Practically all recent type locomotives may be found within that territory, the majority of which represent very heavy power.

(3) Oil is generally used for fuel west of El Paso.

(4) Business does not vary to any great extent throughout the entire year; that is, not to materially affect the train crews.

I HAVE frequently overheard engineers while talking to one another make some allusion to an engine "dropping her plug." Will you explain just what this expression means, and in particular just what the "plug" is and where it is located?—C. J. K., Port Jervis, New York.

It is a plug screwed into a brass thimble in the crown-sheet of the locomotive fire-box. The sheet is directly over the fire, and is normally covered with water to a depth of about seven inches. This plug is made of an alloy of lead, tin, and bismuth, in such proportion as to give the alloy a melting point somewhat higher than the temperature of the water corresponding to the steam-pressure carried. It is intended to prevent the destruction of the crown-sheet by overheating when the water drops to a dangerously low level, as the melting of the plug will allow the steam to escape. Of late they have been largely abandoned in railroad practise through their unreliability, because the melting point of the alloy often rises with long exposure to heat, and scale forming over the plug on the crown-sheet may resist a high-boiler pressure after the plug itself melts.

DOES the cross-head of a locomotive move backward in the guides, or does it remain stationary until it is in the back end of the guides? I know it moves forward. For instance: when an engine is on the forward center and the piston is all the way in, if the engine is in the forward motion and moves ahead, will the cross-head move back, or will it stand still and the engine move forward on the piston? If that is so, how can the wheels revolve without drawing the cross-head back when the cross-head is fastened to the main-rod, which is in turn attached to the driver?—E. T., Southampton, Long Island.

(1) You have hit on the idea exactly in the last sentence of your question, and practically returned your own answer. How would it be possible to effect a revolution of the driving-wheels without moving the cross-head a complete round trip in the guides? The idea about the cross-head standing still and the engine moving forward over it is simply an absurdity, and it is astonishing that it should be given so much credence by men certainly qualified to know better. However, to knock it in the head for your information, and many others who adhere to the fallacy, we will consider the action of a locomotive when mounted on a testing-plant, similar to the one at the St. Louis Exposition, and the one maintained by the Pennsylvania Railroad in its department of tests.

In this instance, the locomotive is stationary on the testing plant, but through friction-rollers im-

pinging on the driving-wheels it is possible to reproduce road conditions. The locomotive is run and fired exactly as though it was on the road, and the service is equally hard, but it does not move one inch. You will note, however, that the cross-heads are flying through their respective sets of guide-bars, and four exhausts issue from the stack at every revolution of the driving-wheels. Thus, any one may appreciate that the locomotive does not move ahead over the cross-head, and that the latter does move backward and forward.

The fact that four exhausts occur as above mentioned should be sufficient proof, without reference to the testing-plant illustration. It would be impossible for these to take place if the round trip of the cross-head did not occur at every revolution, because they mark the outlet of the steam from each end of the two cylinders after it has performed its work. This question comes to this department with wonderful regularity, and we have explained it somewhat similarly on various occasions. We trust now that our thought concerning the testing-plant will dismiss the matter.

(2) Under ordinary conditions the brakes with the long piston travel would release first.

(3) It appears that you are correct in your interpretation of the matter, that if train-line reductions are continued after the short-travel brakes were full set, in order to set the long-travel ones on full, the long-travel ones would release first, but if no further reductions were made after the short-travel ones were set they would release together.

(4) If we understand your question, this is provided for through the equalizing feature of the brake, with which you are of course familiar. It is always best, and will assist us greatly, if reference is always made in these air-brake problems to the particular style of equipment under consideration, pattern of brake-valve, etc., etc. The more complete the description, the more definite the answer. As it is, we frequently have to reply in generalities which do not fully inform.

W. M. R., Biscoe, North Carolina.—The instructions seem to be so very clear in the time-table, and in the special explanatory instructions, that the matter should be in little doubt. It would not appear that the inferior train had a right to the block without a "31" order. You will note that the special instructions particularize that the block card does not give an inferior train the right over a superior train unless the inferior train has time-table rights, or a "31" order. Therefore, it would appear to us that the block card in this arrangement is merely intended as an additional precaution.

A. W. A., Billings, Montana.—The proper person to advise you regarding the qualifications necessary to enter the Pullman service as a conductor would be the nearest of its district superintendents to you. In this case, the man is William Lucas, Omaha, Nebraska. Write him

for an application blank, and for any other information which he may care to give. Our impression is that the pay to start is \$75 per month, increasing to \$90 with length of service.

G. M. Z., La Crosse, Wisconsin.—The "silk trains," so-called, are run as extras when such a movement is necessary, and, therefore, not appearing on the time-table they would have no schedule rights over mail or any other first-class trains, except through special orders, which certainly would not be given in the instance of exclusive mail-trains.

H. C., New Egypt, New Jersey.—Write Mr. A. W. Gibbs, general superintendent of motive power, Pennsylvania Railroad, Altoona, Pennsylvania, who will no doubt be pleased to send you full information regarding the system employed on that road for the instruction of apprentices.

I HAVE been told that copper ferrules, or rings, used on the ends of boiler tubes, were primarily resorted to on account of a mistake made by a boilermaker in boring his flue-sheet. It was bored larger than his flue and, to save the sheet, he inserted a short piece of copper flue, and found it made a better joint than iron. Is there any record of such being the case?—G. F. B., Shreveport, Louisiana.

No record whatever. While such a thing may have happened, and may have been corrected through the means employed, it would be an absurdity to assign this as the explanation for the use of copper ferrules on the fire-box end of boiler-tubes. The ferrule is a copper sleeve fitted over the end of the tube to secure a water-tight joint between the end of the tube and the hole in the flue-sheet. Their use is universal in this country, although abroad as many instances will be found of locomotives without as with them.

I WOULD appreciate a short explanation relative to the back set, or offset of the link saddle-pin, as I notice that different classes of engines have different offsets. Must it be a certain amount, and what is the advantage so gained?—D. J., South Tacoma, Washington.

It will be very difficult to give a short explanation of the necessity for this condition, as the motion of the link is quite complex, and can be much better illustrated through diagrams than description. In brief, the saddle stud is thrown out of center of the link arc to correct the error in the latter's motion arising from the angularity of the main, or connecting-rod, and is placed somewhat back of the link arc. The effect is obviously to cause the entire link to bodily rise and fall during its movement.

The location of the saddle-stud is determined

by trial upon the engine itself, an adjustable stud being provided which is bolted to the link, when, after repeated trials, it is found to be in the best approximate position. The link is then removed from the engine and with the adjustable stud is taken to the link shop where the permanent stud is made in accordance with it. In the case of a number of engines of identical dimensions, the adjustable stud is applied to the first one only, and the following engines of that lot have their permanent studs made in duplicate.

The subject of locomotive link motion in general is quite attractive, and if you feel an interest in it would suggest that you study it from the many standard works which are devoted to its exclusive consideration. These may be procured through any technical book publisher.

P. L., Homestead, Pennsylvania.—There are no available figures for the best time made in building a new engine at the Baldwin Works, although, if it will be of any value to you, we can recall an instance when, with the parts all delivered to the erecting-shop at 9 A.M., the completed locomotive left at 3 P.M. the next day.

WHAT types of engines are used on the Southern Pacific, and the Santa Fe, in California?

(2) How do the speed of those roads compare with that made on the Eastern trunk lines?

(3) At what points on the New York Central are engine changes made with the Twentieth Century Limited?—F. B. H., Haverhill, Massachusetts.

(1) Consolidation (2-8-0), and Mallet compound (2-8-8-2), for freight, and Pacific type (4-6-2) for passenger. The Santa Fe has also Mallet passenger-engines.

(2) Very favorably, although the passenger-trains are much heavier. The time on freight is about the same.

(3) At Albany, Syracuse, and Buffalo.

T. C., Quebec, Canada.—The brevity of your question regarding clearances puts us in some doubt regarding its purport. In submitting it again please say in what connection the two terms are used: that is, in connection with what particular branch of railroading. Track and terminal clearances is what we think you mean, and, if so, these should be self-explanatory, as they simply mean how far objects must stand from the track on the road and in stations.

H. R., South Bend, Indiana.—(1) The Lake Shore and Michigan Southern passenger-trains cross the river at Detroit by ferry. Freight-trains use the tunnel.

(2) It is four-tracked over a portion of the way. Have heard nothing definite in regard to completing this throughout.

(3) The Boston and Albany is a double-track road. It uses ten-wheel (4-6-0), and Pacific (4-6-2) engines in heavy passenger service, and American (4-4-0) type in lighter passenger work. In freight work the consolidation (2-8-0) is employed.

(4) The New York Central has a number of all-steel passenger-cars in experimental service, which are sometimes operated over its controlled or leased lines as well. All suburban coaches on this road running out of the Grand Central Station, New York City, are of all-steel construction.

THEORETICALLY, the exact center of a solid wheel does not move while the wheel is revolving. Is it, therefore, possible for any atom, or particle of matter which composes the wheel, to remain still under these conditions?—H. H. P., Spokane, Washington.

The exact center of a disc is of course stationary, but the atoms composing this stationary line may be said to be in constant motion, and continually changing places with those near by, which are in rotary motion. These atoms are subject to both centrifugal and centripetal forces. Molecular considerations in connection with the rotation of a disc forbid the assumption that any two parts of the disc, or the atoms composing it, can move in opposite directions.

EXPLAIN the operation of a two-cycle gas or gasoline-engine?

(2) Is it possible to obtain an explosion once in every revolution, and can it be obtained without using the jump spark?—W. A. O., Viroqua, Wisconsin.

(1) The majority of these engines are of the crank-case compression type. The piston coming down compresses the charge in the crank case, and when at its lowest position it uncovers the inlet port, whereupon the charge, being under compression, rushes up into the compression chamber. The piston coming up again compresses the charge, and, at the right moment, the spark takes place and ignites it.

(2) A make-and-break spark will work equally as well as a jump-spark. We would advise you to go to some library and look up works on gas and gasoline engines. There you will find full descriptions and illustrations of the different types of two-cycle engines.

E. M. T., Franklin, Kentucky.—See reply to H. E. W., this issue. We don't know at this writing how the other terms originated, but will look them up and secure the information if possible.

WHAT is the name of the officer at division points who issues recommendations of firemen to the examining board of officers?

(2) If a hole is burned in a fire when a heavy

train is starting out, how should it be treated?—H. K. S., Marinette, Wisconsin.

(3) Why are some types of locomotives called "articulated compounds"?

(1) Firemen are generally employed by the road foreman of engines who, on many roads, not only gives them the necessary questioning to determine their fitness for the work, but conducts the sight and hearing tests also. Nothing can be made of your question in the form presented above, but no doubt this is what is wanted.

(2) Fill it up quick.

(3) From the fact that the construction embodies two independent engine units, although with the same boiler. These two sets of wheels have independent movement in relation to one another. See "Mallet and His Invention," in *THE RAILROAD MAN'S MAGAZINE*, June, 1910. Write W. L. Darling, chief engineer, Northern Pacific Railway, St. Paul, Minnesota, for the information requested.

WHAT is the length of the Pennsylvania Railroad System, as compared with the other systems?

(2) What is the largest mileage of any railroad in one State?

(3) How high are the drivers on the engines of the Baltimore and Ohio out of Pittsburgh?—F. B. S., Monessen, Pennsylvania.

(1) It has 11,234.36 miles of road, more mileage than any system under the same direct control. See reply to "F. B.," November issue.

(2) The Pennsylvania Railroad. In the State of Pennsylvania, it has 4,101.03 miles of road.

(3) If you refer to the B. and O. passenger-engines, numbered in the "1400" class, running out of Pittsburgh, these have 80-inch drivers.

H. J. N., Jersey City, New Jersey.—The South Terminal Station, Boston, occupied by the New York, New Haven, and Hartford, and by the Boston and Albany railroads, still retains supremacy as the busiest passenger terminal. The trains handled on summer schedule are nearly nine hundred daily in and out. We have no informa-

tion as yet regarding what the total train movement will be in the New York terminal of the Pennsylvania Railroad when it is in full operation. Chicago is the greatest railroad-junction city.

L. D. C., Roseville, California.—We are under the impression that practically every railroad in the United States of any importance makes the minimum age limit for firemen entering the service twenty-one years.

HOW is the weight of a locomotive figured in tons. Suppose one weighs 243,000 pounds, engine and tender, would the weight be figured by long or short tons?—W. E. P., Thelton, Washington.

Divide your pound weights by 2000. The long ton is not used in this country, but it is well to bear in mind that English locomotives are quoted on the long-ton basis, 2240 pounds to the ton.

W. G., Worcester, Massachusetts.—We have no reliable figures regarding the capitalization of the two roads named, but you can get all information from the annual report of each to its stockholders.

WHAT is the weight in tons of the largest locomotive in common use? Were fire-boxes eleven feet long, used in 1890?

(2) What was the capacity of the largest freight-car in 1890?—R. H. S., Los Angeles, California.

(1) The heaviest locomotive in the world is the Mallet articulated 2-8-8-2 type, on the Atchison, Topeka, and Santa Fe Railway. The weight of engine, without tender, in working order is 462,450 pounds; the total weight of engine and tender, 700,000 pounds. The steam pressure used is 220 pounds, and the engine develops the very high tractive power of 108,300 pounds. Eleven-foot fire-boxes were not in general use in 1890. Nine or ten feet for what were called "long fire-boxes" was the average dimension.

(2) Sixty thousand pounds.

ORIGIN OF HORSE-POWER.

HORSE-POWER measures the rate at which work is done. One horse-power is reckoned as equivalent to raising 33,000 pounds one foot high per minute, or 550 pounds a second. In measuring the work of a horse the estimates of the most celebrated engineers differ widely.

Boulton and Watt, basing their calculations upon the work of London dray horses working eight hours a day, estimated it at 33,000 foot-pounds per minute. D'Aubisson, taking the work done by horses at Freiburg, estimated the work at 16,440 foot-pounds, working eight hours a day.

Under similar circumstances Desaguliers' esti-

mate was 44,000, Smeaton's 22,000, and Tredgold's 27,500 foot-pounds. Horse-power is called nominal, indicated or actual. Nominal is used by manufacturers of steam-engines to express the capacity of an engine or boilers.

Indicated shows the full capacity of the cylinder in operation without deduction for friction, and actual marks its power as developed in operation involving elements of mean pressure upon the piston, its velocity and a just deduction for the friction of the engine's operation. The original estimate of Watt is still counted a horse-power.—*Railway and Locomotive Engineering.*

FLAGGING A FLIRTATION.

BY LILLIAN BENNET-THOMPSON.

How Norah O'Day's Romance with Reginald Launce-
lot De Courcey, Engineer, Ran on an Open Switch.



HERE was a thin film of dust on the claw feet of the table, and Norah, on her knees, was industriously removing it. As she worked, she sang. There was no particular reason why

she should not sing if she wanted to, as her mistress was below stairs and well out of hearing. Norah didn't much care anyway. She had probably heard worse voices.

So the girl caroled lustily, dwelling on the high notes in order to get their full artistic value. Right in the middle of an alluring A-flat she stopped abruptly, cocked her head on one side like a bird, listened, and then hastily scrambled to her feet.

She had become conscious of an opposition concert, that, however lacking in harmony, was, nevertheless, sweeter than the most divine music in her ears. • It consisted of a series of short toots from a locomotive whistle. As Norah poked her curly head out of the window, the locomotive

was just in sight around the curve below the house.

As the cab came opposite the window, a long arm protruded, a cap waved for a moment and Norah had a fleeting glimpse of a smiling, good-natured face upturned to hers.

She fluttered her duster in response and, watching the long string of freight-cars swing by, strained her eyes after the yellow caboose until it whisked around the upper curve of the cut and out of sight.

With a happy, satisfied sigh, she returned to her dusting and her interrupted song,

All the summer, early
and late,
And in the autumn
drear,
A maiden stood at the
garden gate
And waved at the en-
gineer.

He liked to look at her
face so fair,
And her homely cotton
dress;
She liked to look at the
man up there
At the front of the fast
express,

she trilled ecstatically. Somewhere she had read the words and remembered them.



THE LOCOMOTIVE WAS JUST IN SIGHT.

The tune was all her own and she was proud of it.

It required no great stretch of imagination to substitute a second-story window for a garden gate nor to exalt a mixed freight into a through express. Besides, it was a very pretty sentiment. Norah liked to fancy herself in the rôle of the girl at the garden gate, although she was morally certain that Norah O'Day, in the neat blue gown and ruffled apron that set off her trim figure to such advantage, and the coquettishly frilled cap set so jauntily on her abundant auburn hair, made a much more fascinating heroine than the individual in the cotton dress.

It was evident that the engineer of the mixed freight thought so, too, judging from the expression of his blue eyes when they rested on her. Norah hoped that there would be no such tragic ending to her romance as had come to that of the young lady in the poem.

A mixed freight piled in the ditch would not be nearly so picturesque as a string of Pullmans.

For a whole month, there had not been a week-day morning when the whistle of the freight had failed to shriek at the lower curve. The house stood just back from the edge of a rather steep embankment, at the foot of which ran the railroad tracks. The side window of the second story offered a coign of vantage; and every morning, rain or shine, Norah stood there to smile and wave her duster at the man who sat in the engine-cab.

There were only two flies in the delicious honey of her romance. One was that she did not know the name of the engineer; the other, that he had never stopped to speak with her.

The first did not matter so much. What's in a name? A hind-shack by any other name would work as hard. Norah had been reading a wonderful tale of an engineer, named Reginald Launcelot De-Courcey, who had fallen in love with a beauteous maiden of lowly estate. After a long-distance courtship, carried on by means of cleverly devised wigwagging, the gentleman had finally carried off the blushing damsel in the engine cab. He had turned out to be the president of the road, learning the business from the ground up, and he forthwith married the maiden and they had lived happily ever after.

Norah thought "Reginald" a very pretty name. After all, it was quite within the

possibilities that her engineer might be possessed of such a euphonious cognomen. So "Reginald" he became to her, and she adorned his head with a glittering halo of romance, dreaming of the time when the Adonis of the cab should bring the panting monster to a standstill outside the house and call to her in accents of tender passion to fly with him and be his bride.

To be sure he would not know by what name to address her, but that was a matter soon remedied. In the meantime, "my love" or "my own darling" would do equally well, and Norah was certain that she should not fail to respond in either case.

But as the summer wore on and Reginald was still a little backward about coming forward, Norah began to feel piqued. Was it possible that her hero was faint-hearted, or, did he fear to test her love for him? Surely by this time he should have spoken.

But he only smiled and smiled and waved his cap—the same cap, by the way—and it was beginning to show unmistakable signs of the wear and tear of a strenuous life. In the story, the engineer-president had waited but two short weeks before declaring his love. Why, then, did Reginald delay until the time ran into months?

Norah grew weary of watching at the window for the train to come to a halt. Speculation as to whether this or that were the day when Reginald would summon her to his side began to pall. His smile was just as sweet, his gesture as debonair, but Norah longed for some more definite demonstration.

The instant that the wheezy whistle apprised her of the approach of the train, she was at the window, her eyes alight, an eager smile of anticipation on her lips—but the light died and the smile faded, as the train rolled on.

As the summer deepened into autumn, she shook the duster hopelessly, almost mechanically—much in the same way that an electric bell rings when one pushes the button. The whistle touched a nerve in Norah's brain, and her hand responded to the contact by shaking a white cloth in the direction from which the sound came, while her eyes, wistful with hope deferred, followed the waving cap until it disappeared from view.

She felt like *Marianna* in the "Moated Grange." Would he ever come? She told herself that her life was dreary, not worth the living without Reginald. And yet, she

had given him all necessary encouragement, and if he still hesitated and hung back, it ill became her to seem too anxious.

One morning she was going about her work with less than her usual animation. It was late in October, a dull, gray day with a suggestion of a chill in the air. Norah's

A tear splashed on the polished surface of the table, and Norah sadly rubbed it away.

Just as she did so, the sound of the door-bell pealed through the house.

"I'll go, Norah," came her mistress's voice from down-stairs.



"THOUGHT HE'D STOP TO SPEAK TO YOU, EH? WELL, THAT'S JUST WHAT HE DID."

state of mind harmonized with the weather. She had at last come to the distressing conclusion that Reginald had been but trifling with her. His delay admitted of no other explanation.

If he had really loved her, he would have found means to tell her so ere this. True affection would have scorned time-tables and the yard boss. She felt herself aggrieved, slighted, scorned.

It had been a sad day for Norah when she first looked out from the second-story side window and met the twinkling blue eyes of the engineer of the mixed. Why, oh, why had she ever listened to the allurements of a whistled courtship? And, oh, Norah DeCourcey was such a beautiful name!

A moment later, the girl heard the voice again:

"Norah! Norah! Bring my golf jacket down. It's in the closet. Hurry!"

Norah dropped the duster and went to the closet. She took the jacket off the hook, started for the door—then stopped and stood listening.

Yes—there was no mistake. She could distinguish clearly the labored puff-puff of an engine coming up the grade. Reginald's train was approaching.

"Norah!" called her mistress again. "What are you doing?"

Norah hesitated, divided between duty and devotion. Should she hurry down-stairs with the jacket, or stop and wave to

Reginald? Her mistress was waiting impatiently; but what would *he* think if he did not see her at the window? Hark! There was the whistle!

Simultaneously, the voice below screamed "*Norah!*" in acid accents.

She must go! But first she rushed to the window and thrust out her head. The engine was well in sight. Pausing only long enough to frantically flap the jacket she held in her hand, she withdrew her head and sped from the room and down-stairs.

"What were you about?" demanded her irate mistress, as she reached the lower hall. "The cleaner has come for the jacket! He hasn't all day to wait! Take it to him—he's at the side door!"

Murmuring something about "not being able to find it right off, ma'am," Norah took the garment to the waiting cleaner and watched him stride down the path. And then—her heart almost stopped beating.

On the track, almost directly below her, stood a long string of motionless freight-cars, and a man was climbing swiftly up the bank toward the house.

Reginald! Her hero had arrived!

She must go to meet him! Quickly she ran down the steps to the edge of the cut.

"What's the matter?" demanded the man breathlessly, as he came within hailing distance.

"Matter? Nothin'. What do you mean?" asked Norah, wonderingly.

"What was the red flag for?"

In a flash Norah remembered the red jacket she had waved from the window. In her haste she had not thought of the color, and the engineer had taken it for a danger signal. Reginald had not stopped for her, then! He had not even come himself, but had sent the brakeman to find out what had happened!

"Nothin'," she said again, in a meek little voice. "I was just afther wavin' at Reg—I mean at the engineer. 'Tis every mornin' I do it. I didn't notice what color was the coat I shook."

A grin of illuminated understanding overspread the face of the brakeman.

"You'll be the girl that waves out the window every day, then?" he suggested.

"Every day," said Norah, proudly. "'Tis not one I've missed the whole summer. Shure, when I saw the cars there, I thought—I thought—" She blushed and stammered, and the brakeman took up the unfinished sentence.

"Thought he'd stopped to speak to you, eh? Well, that's just what he did. He'd like to meet you. Will you step down a minute? He can't leave the engine."

Norah beamed all over her face.

"Shure, I'd like to," she said promptly.

"Come on, then," said the brakeman.

"But you'll have to hurry. We can only stop a minute. I'll help you down the bank."

Norah gave a little pat or two at her pompadour, shook out her stiffly starched skirts, and prepared to follow. Her cheeks glowed, her eyes sparkled, her lips were parted in a smile over her pretty teeth. She was going to meet Reginald Launcelot DeCourcey at last!

A moment later she found herself standing beside the engine.

"Jack," said the brakeman, "this is the young lady—"

"Shure, you're not him!" burst out Norah, ready to cry with disappointment and vexation. For the man who leaned from the cab-window, cap in hand, was not Reginald! He was a total stranger, on whom she had never set eyes before.

"I ain't who?" the engineer wanted to know.

"The engineer—the man—I—who—he—" Words failed her.

"Oh, you mean the regular man?"

Norah nodded.

"Ain't he on the train any more?" she asked faintly.

"Oh, yes. But I'm takin' his run to-day. My train's the one that goes up at noon. Dan—he'll be on again-to-morrow."

"Dan?"

"Sure. Dan Mulligan. That's his name. Might I ask what yours is, miss?"

"Norah O'Day," faltered the girl.

Norah Mulligan! Shades of Reginald Launcelot DeCourcey!

"That's a pretty name, ain't it, Bob?" observed the engineer, leaning further out of the cab-window. "I say, Miss—"

"He ain't sick?" inquired Norah hesitatingly.

"Who—Dan? Oh, no. He's just got a day off. It's his crystal weddin' anniversary. He's takin' his wife an' the kids out for a little celebration."

"The kids?" gasped Norah, her knees almost giving way.

"Sure. Six of 'em. The baby's the cutest I ever see. Dan's that proud of him! But, say—my train goes up around noon.

Why don't you wave to me? I'd be pleased to have you."

Norah felt that she could hear no more.

"I—I'm afraid I'll have to go in," she stammered. "I—I—got work to do."

"All right," responded the engineer cheerfully. For the first time after that one terrible instant when she had realized he was not her own engineer, Norah lifted her eyes to his face. He was not a bad-looking chap, and his brown eyes were filled with honest admiration.

"I'm Jack McGrath," he continued. "Look out to-morrow, will you?" His hand moved toward the throttle.

But Norah fled.

There was a thin film of dust on the claw-foot, and Norah knelt to remove it. Her eyes were just a trifle red and swollen, but a judicious use of powder had removed most of the traces of the tears that had bedewed her-pillow the night before.

of the song. To-day the joyous lilt was missing from her tones, and she avoided the high notes. Her romance with Reginald



"IT'S HIS 'CRYSTAL WEDDIN' ANNIVERSARY."



Dan Mulligan—a wife and six children!

Over the river and down the track

The train will dash to-day.

But what are the ribbons of white and black

The engine wears away?

In wailing accents, Norah wanted to know. There was a sad and mournful cadence in her voice as befitted the sentiment

Launcelot DeCourcey had indeed struck an open switch.

Suddenly her quick ear caught the rumble of wheels, the quick, sharp blasts of a whistle. She raised her right hand a few inches, then came to herself with a start and jerked it back, plying the duster energetically.

For the first time in months

Dan Mulligan's watchful eye caught no gleam of white at the upper window. He hung out of the cab as long as the house remained in sight, but no one appeared.

A tear trickled down Norah's cheek. She wiped it away and rose slowly to her feet.

"Jack was after sayin' I was to look out at noon," she murmured to herself as her eyes sought the clock.

Naming 1,248 Pullmans a Year.

BY FELIX G. PRENTICE.

DO you remember the delightful story that is recorded in the narratives of the famous philosopher of Chicago, Mr. Dooley, when Mr. and Mrs. Dooley wanted to name the baby boy? The father was intent on having him christened with a couple of good Hibernian appellations, and Mrs. Dooley was equally insistent for a cognomen that was sufficiently poetic to suggest Little Lord Fauntleroy at a pink tea. So they quarreled, and, in the heat of the argument, Mrs. Dooley hotly said to her husband:

"Do you think I want my child named for the pay-roll of the dock department?"

"An' do yez think I want him n-named fer th' Pullman Car Company?" said Mr. Dooley.

How Young Men in the Office of the General Manager of the Pullman Company at Chicago Tease the Alphabet to Manufacture New Monikers.



NY one having cast-off names to dispose of may like to know that they will be thankfully received by the Pullman Company, a worthy corporation which is having a hard struggle to provide its large and growing collection of sleeping-cars with respectable cognomens.

To be perfectly frank, it may be said, though at the risk of wounding a proud corporation's sensibilities, that the Pullman Company is so hard up in the matter of nomenclature that the name "Pioneer," with which the first Pullman car ever built was christened, has been dry-cleaned and made over and fixed up for four generations of cars.

After forty-five years of continuous service in the dust and grime and storm and general stress of railroading, it is in such a state that it cannot be sent to the cleaners again.

Spinsters and other volunteers, always ready to name a new baby at a moment's notice, may think it is no trick to name

a mere sleeping-car. Perhaps it would not be if there were only a dozen or a hundred, or even two hundred, of them. As a matter of fact, the Pullman Company got along famously while the list of proper names in the back of the dictionary held out.

But there were 4,749 Pullman standard sleeping, parlor, observation, and private cars in service on October 1, 1910, and new ones are being turned out at the rate of four for each working day. That is 24 a week, 104 a month, and 1,248 a year. Each and every one of these cars is required to have a name for its exclusive use.

If there is anybody who considers it a simple task to think of twenty-four new names every week in the year, after 4,749 possible combinations of vowels and consonants have been eliminated from the eligible list, just let him try. Let him bear in mind that, according to the rules laid down by the Pullman Company, it is necessary "to select names that mean something, that are euphonious, and that do not have too many letters."

By way of illustrating the application

of the rules: Suppose we select at random a few names from among the 134 Pullman cars on the Northern Pacific.

In the name "Skagit" we have an excellent exemplification of euphony; "Tush-epah" clearly means something, if we only knew what it was, while "Nisqually" is a model of brevity.

Some Northern Pacific Names.

If the point is not yet clear, it may be added that all the virtues to be desired in an ideal name are to be found in "Olequa," "Moclips," "Sokulk," "Palikee," "Nemadji," "Castah," "Atsina," "Che-wah," "Sharha," "Skillute," "Stillashā," "Willewah," "Palouse," "Nehalem," "Wynoochā," "Youcone," "Yampah," "Umpyna," "Kittitas," "Kooskia," "Lezeka," "Opechee," "Minta," and "Nushka."

Twelve hundred and forty-eight new names a year! Is it any wonder that, while all the rest of the world is more or less gay, the young men in the general manager's office at Chicago, which is saddled with a sort of blanket responsibility for the production of names when required, appear distraught, and jump convulsively when a care-free acquaintance from some other department gives them an unexpected slap between the shoulders?

Unfortunately, there is no hope for relief. Instead of being satisfied to let well enough alone, the Pullman Company employs a staff of designers to twist things around in sleeping-cars. In order to meet the designers' plans, the company has to build more cars accordingly. This not only makes a lot of extra work around the shops, but it adds to the burden of wo in the general manager's office. To express in iambic tetrameter the troubles of the unfortunates who have to provide names for the new cars:

While workmen skilled so swiftly build
The scrumptious cars that rouse our wonder,
They sigh and swear and tear their hair,
And darn the luck to thunder.

Fortunately, the names do not have to be forthcoming when the cars are ordered built. A lot number serves the purpose during construction, but in the general manager's office it is realized only too well that each day brings forth its quota of cars.

There are but twenty-six letters in the alphabet, and the possible combinations are

so hampered by the requirements of euphony, brevity, and significance that uncharitable things should not be said of the sponsors if, in their agony, they should bring forth such names as "Coyeta," "Ilus," "Reita," "Currahee," "Juana-luska," "Berhera," "Olytes," "Ophytes," "Rahula," "Zeyla," "Viento," "Bisuka," "Lylete," "Napata," "Navarete," "Azusa," "Garita," "Atoyac," "Contento," "Es-pira," "Istlan," "Liorna," "Eylau," "Mocorito," "Parrao," "Tenescal," "Tavares," "Altata."

Unforeseen contingencies growing out of car names sometimes lead to tragedies. To mention a single example, a young wife on her way to St. Louis, a couple of years ago, gave birth to a child on a Big Four train. There was a physician on board, as there generally is, and the Pullman conductor and porter made her comfortable in a drawing-room. Altogether, the mother was so pleased that she decided to name her boy for the car in which he was born.

But, alas! Little did she realize what a Pullman car name can be when it really tries. Imagine her horror when she found that her beloved son would have to struggle through this vale of tears handicapped by the name "Skalkaho."

Think of it! "Skalkaho Finnegan!"

If he should turn out to be a Russian dancer, he may pull through—but suppose he should be a politician? What would the boys in the gas-house district not do to Skalkaho Finnegan?

Helping the Name-Finders.

Sometimes a neighborly railroad sends in a mess of names that keeps the Pullman Company going for a day or two. This is most likely to happen when the railroad is putting on a new train, or when it wants fresh equipment for an old one. Railroads in such cases frequently ask the Pullman Company to name the sleepers and parlor-cars after cities along the route; or, at least, to provide names suggestive of the locality through which the train runs.

Thus, some of the Pullmans on the New York Central's Twentieth Century Limited are named "Briarcliff," "Rhinecliff," "Kaaterskill," "Knickerbocker," etc. To the Empire State Express on the same road are assigned the "Empire State," "Buffalo," "Little Falls," "Fort Plain," "West Point," and so on.

A few years ago a general passenger agent, inspired by his marriage with sentiments of philanthropy, told the Pullman Company that it might use the names of his bride and sister-in-law. The Pullman Company thankfully christened the next two cars "Geraldine" and "Maybelle."

Following out the idea of providing cars with names suggestive of the country through which they run, the eight Pullmans assigned to the Mexican Inter-oceanic Railway are the "Jalapa," "Malintzi," "Xochitl," "Espanola," "La Heroica," "Mexicano," "Anahuac," and "Uruapan," while the four on the narrow-gauge Mexican National are the "Acámbaro," "Patzcuaro," "El Moro," and "Manitou."

On certain trains on the Pennsylvania the Pullman parlor-cars run to "H's," as "Hartley," "Herminie," "Highspire," "Holly Beach," "Honeybrook," "Hopewell," and "Howard."

Even the Saints!

For a short time the sad-eyed young men in the general manager's office were happy when one of them chanced to run across the calendar of saints. They had almost become reconciled to life by the time they had bestowed the names of sixty saints on sleeping-cars, including "St. Servan," "St. Carvan," "St. Arsene," and "St. Greta."

Then an unmerciful official asked if the Pullman Company was an ecclesiastical enterprise or an early Spanish explorer? And, anyway, would they kindly give the saints a rest?

Then they turned to classical names, but demigods with a past were not deemed eligible to circulate in the exclusive society of limited trains, and the list was cut down almost to the vanishing point. They wandered through Lippincott's-Gazetteer and the Biographical Dictionary, commandeered an "Ambassador," a "Diplomate," and a "Consul" from the diplomatic service, and, in their desperation, even descended to Congress long enough to christen the "Senator."

When all these resources failed there was nothing to do but to fall back on orthographic delirium tremens again. With heroic fortitude these nameless sponsors, for their identity is hidden behind a veil of mystery as impenetrable as a Pullman curtain, started in at "A" and waded resolutely through the alphabet.

Just to emphasize the assertion that they

are not overlooking any bets, they have evolved no fewer than seventy-seven names beginning with "Ch," as "Chusca," "Charo," "Chowah," "Chickies," "Chico," and so on.

Some Prolific Letters.

Altogether, the letter "C" has proved the most prolific in the alphabet, having yielded no fewer than 479 names. "A" did pretty well with an output of 372 names. Even so unpromising a letter as "Z" produced 28 names, including "Zamba," "Zara," and "Zelda." "Y" did better with 32 names, like "Yolande," "Yolanda," "Yentoi." "U" did pretty well with "Ulseah," "Umpyna," and 35 others, but "Q" was hard sledding, for it only yielded 10 names.

It is really wonderful to see what the name-builders can do with unpromising material. Give them an ancient name that doesn't seem to have life enough to stand tacking on a single car, and they will nurse it along, amputating a vowel here and grafting a syllable there until they have fairly outdone the miracle of the loaves and fishes.

Take a simple little name like "Ruth." That does nicely for one car; but you wouldn't think they could irrigate and fertilize those four simple little letters until they produced "Ruthella," "Rutherford," and "Ruthven," would you? Well, they did, just the same.

In the same way, "York," after having some yeast stirred in and being set by the kitchen stove, swelled to "Yorklyn," "Yorkshire," "Yorktown," and "York Haven." "Rhoda" yielded "Rhodes," "Rhodesia," and "Rhode Island," and "India" was worked up into "Indiana," "Indianola," and "Indianapolis."

One of the favorite railroad classics relates how George M. Pullman used to pay his daughter Florence \$10,000 a year to name cars for him. As the idealization of the soft snap for which we spend our lives hunting, this story struck a universal heart chord. In short, it never failed to make a hit. Moreover, it would have been just like Pullman, if he had been that sort of man. But not being that kind of man, he never did anything of the sort.

The story grew out of a Chicago space-writer's need of three dollars.

The question of names seems to have

haunted Pullman throughout his life. Even the town of Pullman was not named without difficulty. It seems that the architect employed to lay out this model town, which has been written about more than any other town of the same size in America, was W. W. Beman. He became so enthusiastic as the beautiful plans grew under his hand that he was filled with a desire to immortalize his name by bestowing it on the model town.

Naming a Model Town.

When a favorable opportunity presented itself he mentioned his modest ambition to Pullman. That famous car-builder turned the request over in his mind a moment; then said:

"Well, the fact is, Mr. Beman, I had rather thought of naming the town for myself."

Noticing a cloud of disappointment spread over the architect's face, he hastened to add: "But I'll tell you what we can do; we can compromise the matter. Suppose we make up a name by taking the first syllable of my name and the last syllable of yours. Then we will both be happy."

Apparently there is no way to avoid the necessity of providing palace cars with names. In the first place, the railroad companies cannot furnish the service provided by the Pullman Company. One strong appeal that the Pullman car makes is that it goes where the passenger wants to go, regardless of the number of roads it has to pass over to get there.

It might, perhaps, be feasible for the railroads constituting a through line to agree on some plan for providing equipment for ordinary service, but no railroad is willing to tie up money needed to furnish the extra equipment to meet emergencies that altogether amount to half a dozen days a year.

Just to show the extent of these emergencies, take the case of the New York Central, which required 900 extra Pullmans to bring home returning New Yorkers the day after Labor Day. The cars were on the spot when wanted. When it is remembered that but 1,100 Pullmans are assigned to all

the busy roads in the district of which New York is the headquarters, it will be seen that emergency demands are pretty heavy.

It is a safe guess that no railroad would be willing to tie up \$22,500,000 in 900 extra sleeping-cars to be used but once a year. Neither would they be willing to provide the extra equipment to make up the five bankers' specials that crossed the continent early last fall.

But the Pullman Company can do all these things, because there are emergency calls from somewhere in this big land pretty nearly all the time, though it is seldom that more than one hurry call comes in at a time.

This enables one central organization to keep its reserve equipment in pretty steady service. This makes for economy. By a wise manipulation of the reserve equipment, all the fluctuating demands of traffic are met with a minimum deadhead mileage, but it takes a lot of work.

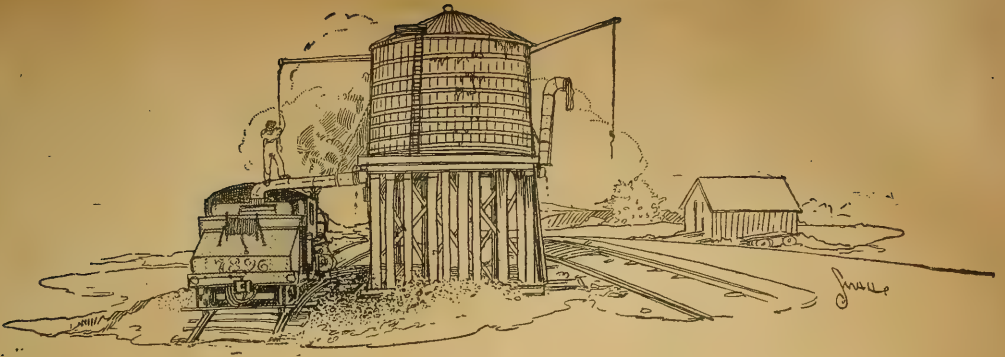
One man at the New York headquarters spends his working hours before a board full of holes that fills one side of a room and overflows on to another, sticking wooden pegs into the holes and taking them out again.

Each peg represents a Pullman car, and the board shows the manager at a glance just where each car is, and where he can look for reserves to meet a demand from any point in his large territory. Another man is fully occupied in keeping tab on joy-riders in private cars scattered all over the North American continent.

Pullmans must continue to bear names, because the railroad companies number their coaches, hauled on the same trains with them. If the Pullmans used numbers, too, the inevitable result would be confusion in handling trains; so there is nothing to do but grind out names. Yet there is a mathematical limit to what can be done with twenty-six letters. Every day that passes brings the crisis nearer.

If Congress could spare a few moments from its full-crew bills, locomotive-inspection bills, and unlimited-baggage bills, perhaps it might be induced to place imported car names on the free list.

You can't drive a quarrelsome man or a balky engine, — leave 'em both to the wrecking crew.—The Old Eagle Eye.



Heard Around the Water-Tank.

BY TOM JACKSON.

NOT all the interesting stories under this heading deal with railroad men themselves, but Tom Jackson, who is an old-time tallow-pot, has gathered yarns from many sources, and, as they are all interesting, we are glad to give them space. And if you will ask Tom Jackson, he will tell you that his railroad days were the happiest of his life. Each story that follows contains something that will interest. If, when you have read them all, you do not see the railroad man from several new viewpoints, then we have missed our guess.

The Washout Sign—Asleep in the Cabin—For a Mail Contract—Cool Heads in Danger—The Wonderful Watch—Our Mother Tongue—Spotting the Married Ones.

McCASLAND'S WASHOUT SIGNS.



ANDY McCASLAND will verify the truth of the statement that a man on the right side of an engine will stop when any object is violently waved across the track. That is an old rule in railroading which has always been strictly adhered to by every employee, and one that has doubtless saved many lives.

Andy was an engineer on the old Cane Belt road, a property long since absorbed by the Gulf, Colorado and Santa Fe, which runs from Sealy to Matagorda, Texas, a distance of ninety miles, through what was

then the wildest country in south central Texas.

One stretch of eight miles ran through the famous Wharton Bottom, a forest of oak and elm, with an undergrowth of haw and wild brier.

The bottoms were said to be the abounding place of escaped convicts, bear and deer. Andy will bear me witness that in those early days of the Cane Belt, the bottom certainly was the ranging grounds of a certain mule, the mule having caused Andy to put her over and give her all there was, one foggy morning in 1901.

We were south-bound local freight No. 5, with engine 108 pulling us. Andy McCasland, a young tallow-pot just from the Katy,

was at the throttle, and Herman Boze was handling the scoop. I was braking ahead, and, as a matter of course, while the train was in motion I was in the head man's accustomed place on the seat box behind Herman, getting my brief bit of "spot."

We had been on the road all day and all night and were all but dead from loss of sleep, and we were overworked from unloading bacon and corn-meal at the stations between the two terminals.

Being thus "batty-eyed," no doubt accounted for Andy's optical illusion, and when he saw an object coming down the track right in the edge of the woods, waving a stop sign, he concluded that something had gone wrong with the track.

He reached up and got the whistle-cord, tooted twice in answer to the "washout," and then gave his air about ten pounds reduction.

The fireman looked ahead and saw what he imagined to be a high-ball coming from the same source, but Andy was too busy stopping to notice a high-ball and finally brought the train to a full stop.

Then he looked up. Sure enough, something or somebody was giving him an old-fashioned high-ball.

Andy started his train again, and by this time the "tallow" had awakened me. I looked ahead at his request and saw the object. It was giving another "washout" stop-sign, following up with a high-ball.

Andy was tooting like mad, and mad as a hornet he was, for by all that is uncanny, the signal-maker proved to be a lop-eared mule which had come out of the bottoms to avoid the mosquitoes and had stepped on the track.

He was busy switching the pests off with his tail and at every motion he would give either a stop-signal or a high-ball. It was so nearly like the real thing that Andy McCasland put the old 108 in the big hole and stopped dead, fully believing that some track-walker had signaled.

ASLEEP IN THE CABIN.

SPEAKING of Wharton Bottom reminds me of another incident which occurred on the same line. It happened in September, 1901, during the heavy rush of business on the Cane Belt, when the cotton season was on and the rice rush—then in its infancy in Texas—was just looking up.

That fall was a wet one, even for south Texas, and as the track was new and poorly ballasted, it was almost impossible to move faster than six miles an hour through Wharton Bottom, which before the coming of the railway was a dismal swamp.

That part of it through which the road runs, is somewhat higher than the rest, and the dump, built of mud from the barrow pits, acts as a dam for the lake on either side.

We were going north on No. 6 one rainy night, and, as the engineer had loved ones at home awaiting him, he was doing his best to make as fast time as possible.

When about the middle of the woods, the old three got it into her head to act nutty. She put her two fore-feet on the ties, and ran in that manner for several hundred yards before the hogger could stop her.

Four blasts of the whistle had the conductor, Luke Dial, and two brakemen come to the front, and the work of replacing the mill was begun.

We worked for two solid hours, back and forth and round about, carrying heavy frogs and ties until we were almost exhausted. Finally we got the engine back on the rails and started on our way happy in the thought that we would soon be out of the bottom and on good track again.

We were soon to be sadly disappointed, however. We had not gone half a mile before we were all huddled in a corner of the caboose with the stove and the water-cooler on top of us, and with smoke and brimstone rising from the floor of the caboose where the captain had gone down.

We extricated ourselves from the links, pins, air-horse, and other objects, and went ahead to ascertain the cause of the sudden stop.

What we saw made us sick. Three furniture cars crosswise of the track and on each side a lake of water three-feet deep, and no dry sand in sight.

To add to the pleasures of the afternoon, a cold, misty rain was falling. There was nothing to do but make an effort to get the cars back, and we worked like demons for five hours, finally succeeding in getting every car on the rails.

We were standing beside the cars congratulating ourselves on being tip-top wreckers, when something else happened that made us all declare that as soon as we arrived at the division we would tender our resignations.

As soon as we got the cars on the track we had the engine back down to the scene of the derailment in order that we might more conveniently load the frogs onto the tender.

While this was happening the rails, which had been loosened by the derailed cars, turned under the engine, letting her down into the mud, and making it impossible for us to budge a wheel.

There was nothing for the crew to do but return to the caboose and go to bed. This we did, although it began to look as if the rear man would have to go back a distance of twenty telegraph poles, and protect our train.

The hind man refused to do anything of the kind, putting up as an excuse that there was not an engine on the south end and it was impossible for a train to hit us.

We were working under standard rules, however, and something had to be done, so we compromised on the negro cook, Joe, who lived in our "dog-house." Joe agreed to go back to Bear Junction, a mile away, where there was a cabin erected by wood-choppers, and do the flagging.

Next morning we sent back for Joe and found him asleep in the cabin.



A RACE FOR MAIL CONTRACT.

BACK in the early eighties, considerable rivalry existed between two great trunk lines, the Louisville and Nashville and the Queen and Crescent; for the mail contract between Cincinnati and New Orleans. Word had been received from the Post Office Department in Washington that the mail contract was to be awarded to the road making the best time over these two lines. On a certain day word was sent down the line of the Queen and Crescent that the big race was to be pulled off the next day.

First No. 5, consisting of a mail-car, baggage-car, two day-coaches and a Pullman would leave Cincinnati at 9.30 in the morning, would have the right of way over all trains, and would be given a clear track—the white board by day and the white light by night.

As a precaution, track-walkers, acting under orders of the division road-masters, had personally inspected all switches and road-bed culverts, and looked for any bolts or taps that might be loose. Section-men with

white flags by day and white lights by night were stationed along the line to give the proper signals that all was right. In fact, every precaution was taken to assist in the fast run being made without accident.

Promptly on the second, No. 5 rolled into the car shed in Chattanooga. There the Cincinnati Southern men surrendered the train to the Alabama Great Southern crew, who were to make the record-breaking run to Meridian, Mississippi, a distance of 295 miles.

The train was in charge of Captain Martin Ford, conductor. Jesse Haver, as cool-headed and fearless a man as ever pulled a throttle, was in the cab. His engine was one of two large McQueens that had been sent down from the shops in Ludow, Kentucky, for the occasion. These were considered the fastest passenger-engines in the service of those days.

Only a few moments were consumed in transferring train equipments in Chattanooga, and we were off. The Cincinnati Southern having made a record-breaking run from Cincinnati, we were eager to hold up the good start over the Alabama Great Southern division.

By the time the red lights on the rear end of the Pullman passed out of the lower end of the car-shed we were hitting a twenty-mile clip, with sand running from the dome-pipe and the big drivers catching good "toe hold" on the rails with every revolution.

Out in the darkness like a thing of life, the great curls of black smoke boiling from the McQueen's smoke-stack, rushed the train—the smooth rails under the glare of the headlight looking like ribbons of silver.

The white lights flashed as she sped through the yards, past Cravens, where the white light shining like a star was flashed, then around the bend of the blue Tennessee, hugging the great gray walls of "old Look-out," now and then the big, brass bell clanging with the swaying of the engine as she gathered momentum.

Down through the little hamlet of Wanhatchie, where the switch had been turned onto the Alabama Great Southern main line to save stopping, then down the long straight stretch through Wildwood.

Then it was she sprang forward like some frightened bird darting out into the black night. The engineer dropping her down a couple of notches and tapping the throttle-lever, the big engine responded nobly.

Rising Fawn, Sulphur Springs, Valley Head, Fort Payne, Potterville, Collinsville, Atalla—all flitted like shadows.

At Springville, a stop was made for water, "Now, my boy, take that water, quick," was the order the fireman received.

"Hustle round and keep your eyes skinned for a hot box," was the order the brakeman received.

"She is as cold as charity," came from the brakeman as he made a hasty survey.

Then off again down through Trussville and into the "Magic City," panting and throbbing, the trip was made in four hours and five minutes.

The crew uncoupled and backed in the other big McQueen, the mate to Haver's pet. Dick Moore, every one knew Dick, the jolliest fellow on the road and a bundle of cold nerve, climbed up into the high cab. What he could not get out of an engine was in the scrap pile.

Clang! clang! went the big bell and we were again racing against time, great chunks of white-heated cinders flying from the stack and sparks from the drivers.

Down through old Jonesboro we flew, racing against the storm.

"Will he stop for the drawbridge over the Warrior and Tombigbee?" asks some one in breathless excitement.

"Call it stop," says the brakeman, "but if you had fired a cannon-ball at the engine you would have hit the sleeper. We are away past Epps and Eutaw and that whistle is for Livingston."

The target lights of the Mobile and Ohio flash as we dash across its tracks.

"Meridian! All out for Meridian!" yells the brakeman.

Here we turned her over to the New Orleans and Northeastern boys, having made the run from Chattanooga in eight hours and twenty minutes, a record breaker for the Alabama Great Southern.

The New Orleans and Northeastern beat the L. and N. by four hours, and secured the mail contract for four years.



COOL HEADS IN DANGER MOMENTS.

THIS incident happened eighteen months ago, on what is known as the D. and R. G. and C. and S. joint track between the junctions of Walsenburg and Cuchara, in Colorado.

I have witnessed many deeds of daring, many acts of charity, and many "dare-devil" stunts performed by railroad men, but I never before saw such a quick-witted, cool-headed stunt as the following. After it was all over I told the conductor, and all the satisfaction that I got from him was:

"Well, you have certainly got to have your head cut in all the time down on this joint-track, if you want to get over the road."

It was a Rio Grande passenger-train that left Denver about 8 P.M., heavily laden with passengers for the San Juan and its tributaries. This train had reached Cuchara Junction on time and pulled out at about 1.30 A.M.

The wind was blowing nearly a hurricane, and the mercury was down below the freezing point.

The blackness of the night did not help to make it very pleasant for Engineer Walter Henthorn. The snow beating against the window in his cab kept him with his head continually out searching the inky blackness for danger.

It is a busy piece of track between Walsenburg and Pueblo, and the two big railroads handle many trains there in twenty-four hours.

Henthorn had just whistled for Walsenburg Junction, when out ahead on the main line he caught sight of the three red lights of a freight-train bearing down upon him.

On the rear end stood a man giving him frantic signals with a red lantern to back up.

He started his train back toward Cuchara, thinking that a freight-train was backing down to head in and let him pass, but as the signals became more rapid and the train got nearer, he came to the conclusion that it was a runaway coal-train.

To back his train east without a flag to protect, was an awful risk, as No. 115 never left Cuchara without at least two or three west-bound freights following.

At this time the entire force of machinists on the system were striking, and many engines were compelled to run without headlights.

It was a trying position. It seemed to be one thing or the other: to stop and be crushed to death by the approaching train, or hurl the train with its hundred or more sleeping passengers to certain disaster.

A cool head appeared in the person of Conductor George Stout. He had taken in the situation at a glance. Suddenly the rear end of the passenger-train was a blaze

of red lights. As fast as one fuze burned out, another took its place.

Their speed had to be increased in order to outdistance the fast-approaching outlaw, and their little engine was throwing sky-rockets into the air and streaks of fire from the slipping drivers.

A train length ahead of the oncoming caboose was the best they could do. The conductor, after getting the rear-end decorated and a flagman at his post, came through the train and turned out every gas-jet, but to every questioner who asked why, jokingly answered, "just saving a little gas," knowing full well what the consequences would be had he showed the least excitement.

The passengers might become panic-stricken and jump to their death in the darkness.

Stout believed that if they beat the runaway to Cuchara they could throw it into a siding. The possibilities were that all the tracks were full of trains, but they had to take a chance. It was now simply a case of the less killed the better.

The flagman was to jump from the rear end of the train and throw the siding-switch after his train was into clear.

If he fell and failed, the conductor, stationed at the head of the sleeper, would make the attempt.

Fortunately the flagman made the switch and shot the runaway down a clear siding. It was a caboose without a hand-brake. Conductor McCoy of the freight had ridden that flying demon down those steep six miles, absolutely helpless to control its speed but able to warn the passenger-train.

He is one of the heroes of which the railroad men are justly proud.

The caboose ran through the siding and stopped just in front of an extra pulling into Cuchara. Conductor Stout had rushed to the telegraph office and asked the operator at Apache, the first station east, to hold all trains west—but the extra had got out.

No one was killed or even injured, and thousands of dollars' worth of property was saved by a little nerve and some good judgment on the part of a little band of railroad men.

THE WONDERFUL WATCH.

"RAILROAD men are inclined to look on the locomotive as the greatest piece of machinery in the world," said a jeweler, as he adjusted an engineer's time-

piece. "But they are mistaken. Every railroad man carries the greatest piece of machinery ever constructed right in his own pocket—his watch.

"The locomotive must run on a comparatively level track, a grade of one foot in ten is too much for the average engine to climb, although some few can do a bit better than this. But a watch runs upside down, or in any possible position. It is the most compact, the strongest and the most delicate piece of machinery ever put together by human hands.

"I know of nothing to compare it with, except possibly two things—the modern high-power automatic rifle and the human eye. Both of these are compact, strong, and delicate, but, of the three, I think the watch leads.

"The average watch has about 175 parts. Iron, gold, silver, copper, and nickel are used in its construction. Then there are the jewels, each of which must be cut more accurately than the average diamond for a ring.

"It takes about 2500 different operations to make a watch.

"But these numbers are almost nothing when we stop to think what a watch does. To begin with, it strikes 432,000 blows against the fork every twenty-four hours. There are about 1800 steps to the mile, as the average man walks, and if he took a step every time his watch touched the fork he would travel 240 miles in a day, or at the rate of ten miles an hour.

"This means 157,680,000 impacts a year, and this run is made without a single stop for rest. The watch does not go into the shops every now and then as even the best engines must, nor is it oiled and readjusted for its next run. Suppose we treated a locomotive as we do a watch. It would mean that an engine would run at least a year, and after four or five years, never stopping night or day.

"I doubt if the average engine could stand it for one week, to say nothing about one year. Usually we do oil our watches about once a year, sometimes only once in every two years. Think of a locomotive going two years without oil!

"Even when we figure it out on a mileage basis the watch has the best of it. The balance wheel moves 1 43-100 of an inch each time, a total of nearly 3,559 miles a year. As watches are usually taken care of, this means about 5500 miles on one oiling.

"Now the average watch uses about as much power as four fleas would develop. It is estimated that one horse-power will run 270,000,000 watches. In other words, the watch as an engine, on one oiling, will run over 3500 miles on 1-270,000,000 of one horse-power constantly applied. Where is there a locomotive that can even come in sight of such a record?"

"A man often drops his watch, picks it up, puts it to his ear, and, if it is going all right, which is usually the case, he thinks no more about it and the watch keeps right on with its work. Drop a locomotive the same distance—say only five feet straight down—and it is the shops for that engine."

"There are many scientific instruments far more delicate than a watch, and many machines far stronger; but for strength and delicacy combined, nothing equals a watch."



OUR "MOTHER TONGUE."

THERE is something in the railroad business that gets into the fibers of a man. It becomes part of his life; tinctures his thoughts, sways his moods, gives a distinctive air to his looks, and shapes his speech.

Especially is this so in the case of the men of the Western road's, where there isn't much to interfere with the development of the individuality that arises from constant contact with the right-of-way.

An old eagle eye never referred to his cap, but always to his "dome casing." Had he occasion to hunt for his coat he wondered where the "jacket" was side-tracked. His legs, he called his "drivers." His hands were "pins," his arms, "side-rods," his stomach the "fire-box," and his mouth "the pop."

Another of his kind would speak of a missing suspender button as a "shy spring-hanger." If a man hurt his foot and walked with a limp, he had a "flat wheel." When eating he was "firing up," when drinking he "took water," and if he had indulged too much he had "oiled round."

John A. Hill, who knows railroad men to the core, tells of an engineer on the Pacific Coast who once expressed himself as follows in the course of a conversation:

"Say, guess who I met on the up-trip? Dick Taggart! Sure. I was sailin' along up the main line near Bob's and who should I see but Dick backed in on the siding looking dilapidated like he was running on

one side. I just slammed on the wind and went over and shook. Dick looked pretty tough. He must have been out surfacing track. He was oiled a good deal; jacket rusted and streaked; tire double flanged; valves blowing; packing down; didn't seem to steam right. He must go to the back shop before the old man will ever let him in the roundhouse."

"I set his packing out and put him in a stall in Gray's corral. Dick's mighty good working scrap if you can only get him down to carrying water right. If he'd come down to three gages he'd be a dandy; but this trying to run first section with a flutter in his stack all the time, is no good—he must be flagged in."

A Chicago switchman, when asked if it were true that he intended to marry, said:

"I wouldn't care to double-crew my train. I've been raised to run my own engine and take care of it. When you double-pack, there is always a row as to who ought to go ahead and enjoy the scenery or stay behind and eat cinders."

An engineer was overheard lecturing his fireman thus:

"Well, Jim, I'm ashamed of you. You come into general headquarters with your tank afloat, so full that you can't whistle, with your air-pump a squealin' and the hull of you misbehavin' scandalous. You was smeared from stack to man-hole, head-light smoked and glimmery; don't know your rights, kind of runnin' wild-cat without proper signals; imagining you are first section with a regardless order. What you want to do is to blow out, trim up, get your packing set out and carry less juice."

"You're worse than the slipping, dancing, three-legged freight haulers that the new super has sprung on us. The next time I catch you at high gage I'll scrap."

"Oil around if you must, but put the air on steady, bring her down to a proper gait, throw her into full release so as to stop right, drop a little oil on the worst points, ring your bell, and go ahead."

This is how an old railroad man described the wedding of his adopted daughter:

"I've been up to see a new compound start out—prettiest sight I ever saw. Maybe I'm a bit dubious about repairs and general running, but I guess they'll make out all right."

"That little girl of mine was the trimmest, neatest, slickest little mill you ever

saw. She was painted red and white and gold-leaf, three brass bands on her stack, solid nickel trimmings, all the latest improvements—jest made on purpose for specials and pay-car. She got coupled to a long, fire-boxed, ten-wheeler with a big lap. Yes, sir, that babe of mine is a heart-breaker on dress parade and the ten-wheeler is a mogul for business."



ON THE HONEYMOON SPECIAL.

"WHEN the matrimonial market is buoyant," said an old con, "it is interesting to notice the newlyweds starting on their first journey.

"Of course, it is not on account of being ashamed of each other that they try to disguise the situation, but simply to avoid being criticized by inquisitive strangers. They lay the fond unction to their souls that they are traveling incog! But, how badly fooled they are.

"It is one of the easiest things in the world, to the careful eye, to tell precisely how many days, or even hours, they have been spliced. They can sometimes be detected by the great pains they take to appear like old married people or cousins, as they sit demurely in the cars. In many cases, their dress exposes them—it is so terribly in tune with the occasion, being neat, symmetrical, and new. In cases where the parties have good taste, there is no gaudiness or flub-dubbing about their attire.

"Sometimes the youthful culprits en-

gage in playing at lovers, or affect a flirtation, but it is always a stupendous failure. Their eyes betray too much happiness for such a disguise. There is such a peculiar softness and tenderness in their confidential whispers, and such a pride in the possession of each other, that none around them are deceived.

"It is generally the case, that the bridegroom makes the discovery first, and throws his arm carelessly around the shoulders of his wife, as much as to say defiantly to the envious: 'Who's afraid? Who knows but we have been married many years?'

"The guilty slyness in the way that arm steals round, first on the seat-back, then gradually closer, while the bride evinces a silent blush as she acquiesces in an unperceiving way. Indeed, it is she who generally lets the cat out of the bag.

"The narrow-gage seats are preferable to the broad-gage, and if you sit on the seat back of a couple, you will observe at first the lady's shoulders are not even—they incline just a little to her partner. After traveling in this position a few hours, her neck gets as limber as a washed paper-collar, and her head gravitates to the broad shoulders of her husband, and there it nestles innocently and confidently, in the repose of honest and truthful love! At times, in spite of all precaution, one or two of her golden locks will get loose and drop on his shoulder.

"So they go, fancying themselves lost in the crowd—unnoticed, unknown—with their secret locked up on their own palpitating bosoms. Poor newlyweds!"

NEW TUNNEL-BORING MACHINE.

A NEW form of tunnel-boring machine has lately been devised by Mr. Ebbley, formerly master mechanic of the Old Dominion Copper Mine, at Globe, Arizona. The inventor says his device will average twenty-five to fifty feet a day. No blasting is required, and this eliminates one of the dangers and a large part of the cost.

No gases collect to hinder progress of the work. Three men on a shift can operate the machine.

The machine drills a circular hole from eight to twenty-five feet in diameter. It is intended to go through any ground that a machine drill will work in. The track is laid and the timbers placed as the machine proceeds. From one hundred and fifty to two hundred horse-power is required to operate the borer, but the cost of this is offset by the saving in men, powder, and time.

A large hollow shaft is mounted on a carrying

frame running on wheels on the track. At the head of the shaft are radial arms carrying different drilling machines of special design for cutting channels in the rock.

There are three complements of drills, the outer set cutting the channel that determines the size of the bore. Another set cuts a channel in the rock or earth, a foot or two inside the line of the outer channel. A third set cuts a still smaller ring in the rock, and other sets may be used. Hammers pound against the rock with smashing force as the channels are cut, thus breaking out the rock and earth and allowing it to fall to the floor of the tunnel. A shovel that has a reciprocating motion, with accelerated speed to the rear, gathers up the muck and throws it behind the machine. The shovel is handled by an air-cylinder equipped with a specially designed valve-gear.—*Exchange.*

SMITH'S LAST GAME.

BY SUMNER LUCAS.

It Doesn't Pay to Be a Practical Joker and a Poker Fiend All at Once.

IF you please, sah, de lady in de next car says as how she wants to see you, sah, if you're her husband, sah. Am you Mistah Smith, sah?"

"Tell her in just a minute, porter—in just a minute," murmured Smith as he sorted a tray of clubs into the discard, and prayed silently but hard for another spade. This was the third message exchanged within an hour in almost exactly the same words between "de lady in de next car" and Smith; yet Smith still sat in the game—a quiet little game of poker in the drawing-room of the Denver Pullman on the east-bound flier running out of Green River, Wyoming.

Ziggitty, the big, fat colored porter of "de next car," scratched his wool with an anxious air, and for the third time departed to face a square-jawed woman, who abused him for the shortcomings of her poker-loving husband.

"The idea! He has played all day, and now it is getting supper-time; and I've been alone all day, and the man said 'second call for dinner in the dining-car' fully half an hour ago. Very well, I'll go eat alone," which the irate woman did. A sandwich was all Smith wanted.

"Ugh!" was all he had to say to the information that he must seek the diner at once or get nothing to eat that night. What is a diner and a table-cloth lecture on the evils of gambling and wife desertion compared to four eights with a blue jackpot just about ready to be hauled in?

Smith stayed in the game.

The four players were old chums. Many a good time had they known together, and many was the joke they had played; sometimes on each other, but more often on some suffering outsider. The year before, when the four had been together for a trip across the country, Smith had left the train and bought a pair of clippers. When his chums were sound asleep he had nicely clipped great bald patches on their heads and then flung the clippers and the hair out the window, no one being the wiser.

Next morning, in the dressing-room, there was considerable swearing, much to Smith's innocent surprise. The rest of the car had roared, even the dining-car waiters had shown a suspicious amount of dental ivory that morning; but Smith could not account for the sudden change in the appearance of his friends. When they noticed that Smith had a full head of hair they were suspicious;



SMITH SLID CAREFULLY
OUT OF THE UPPER.

and when they accused him of fleecing them, he looked hurt and talked much about the weakness of personal friendship, even under the strain of a few hairs.

During the next year the three whose hair had been clipped received all manner of advertisements for falling hair. They bore it all in good part, and now the four were together again for the first time since that memorable occasion.

No money was in sight, that being against railroad rules; yet there was plenty of white, red, and blue chips on the table, and, gentlemen's agreement, the chips represented good hard money when the game was over.

"If you please, boss, de lady in de next car, she says, sah—"

"All right—all right! Tell her I'm coming in just a minute. Soon as we play out this hand," and Smith shuffled the deck for a new deal. He was considerably ahead of the game, and did not want to quit a heavy winner. It wouldn't look just right, especially as he had been behind for some time.

"Tell you what you do, Smith, old boy," suggested big, raw-boned Anderson. "We've been hitting it up pretty lively all evening. Suppose we just suspend operations for a couple of hours, take a rest, and begin again about midnight. It's too hot to sleep in those padded boxes to-night, and we might as well play all night as suffer in a berth.

"Suppose you go back, as Ziggitty says, and go to bed like a good little boy. Will give you a chance to get your clothes off, anyway. Then when the good wife is asleep you get up on the q. t., and sneak in here. Your pajamas won't be noticed that time of night, and we'll go on with the game. What you say?"

"Let's see," said Smith, looking at his watch, "ten—ten. Where do we change time? Green River, isn't it? All right, boys. I'll be back soon—trust me. Cards and matrimony don't mix well; but, as I have cards only once in a while and matrimony all the while, I'll be back soon as I can escape. Ziggitty!"

"Yes, sah?"

"What time do we get into Omaha?"

"Two-fifteen to-morrow afternoon, sah."

"Well, good-by, boys. See you later. Whew, it's hot! Pray for me, boys; I now go to my doom," and Smith, after cashing his chips, left for the rear Pullman.

To his surprise, Mrs. Smith hadn't a word to say. She was in the lower berth, and pretended to be very drowsy as Smith climbed into the upper. Then the train settled down for the night, and the air grew cooler as Sherman Hill was passed.

Smith dosed off a bit, then awoke with a sense of having slept for hours. He cautiously looked at his watch.

"Midnight, and half an hour over. The boys will think I'm not square with them, not to give them a chance to play even."

Smith slid carefully out of the upper, and, after a breathless second to see if the wakeful Mrs. Smith had discovered his flight—clad in his pajamas—he slipped along the swaying car and into the sleeper head.

"Quitter! Play your friends for the cash, and then run! Cold feet!" greeted Smith as he sat into the game.

"Boys, we have till two o'clock. You are in the Denver sleeper, and I'm bound for Chicago. We divide at Cheyenne at two o'clock. The game ends at one forty-five. Get busy and win it back if you can."

In half an hour Smith said:

"Wonder what we are stopping for? Backing up, too—"

"You're shy, Smith. Chip in. Your deal, Pete. Time enough to worry later. It's only one o'clock, and we don't hit Cheyenne till two, an hour from now. Play up. Don't try to string the game out, Smith, old boy, so you can hold on to your winnings. Deal 'em out."

The game went on—so did the train. Everything was running smoothly till Smith looked at Anderson's watch.

"Holy smoke! Just time for one more round. Twenty minutes to two. Deal 'em out lively now."

Smith's luck had changed, and he was thirty-five dollars behind. Anderson glanced at his watch and dealt the cards. Smith bore a pained expression as he drew two more cards, after which his face became as expressive as a piece of putty. The other two dropped out, leaving Anderson and Smith to fight it out alone. Anderson had drawn two cards also.

"It's the last hand," said Smith, as he shoved all his chips into the middle of the table. "If I lose, I'm out—clean buncoed by you cutthroats; if I win, I'm out ten dollars. You get me going and coming. Wish we had longer, I'd skin you chaps



"NEVER SAW THE POOR FELLOW BEFORE."

alive and leave you without a thread to your backs. You're not game—"

"Well, now, Smithy, old boy. Seeing as how you are talking about being short either way the cat jumps, and being game and all that, and especially about betting the clothes on your back, I'll just shove all the chips in my pile into the pot against that suit of pajamas of yours."

"Done!" said Smith.

Only two hands out, each a two-card draw, and Smith held four aces. He could quit honorably under the circumstances, as the dividing of the train made that necessary, and be a heavy winner in the bargain, just by calling that idiotic bluff of Anderson's about betting the last rag on his back.

Then came the show-down. "Give 'em to me!" gloated Smith as he reached for the pile after throwing down his four single spots.

"Not so fast, Smithy; not so fast. Ever hear of a straight? A real nice queenly flush, you know. It takes the chips and the pajamas—but you can keep the pajamas, old man. Good night, Smithy."

The three made a break for the door, while Smith danced up and down in sudden rage.

"Say, you horse thieves!—You send Ziggitty here right away. Say, porter, porter!"

But no Ziggitty came.

Instead, a scowling yellow face was thrust through the drawing-room door and a sleep-surlly voice said:

"You got to quit dat racket, sah. No such noise am 'lowed in a Pullman at dis time of night, sah."

"Say, porter, here's a dollar"—Smith's hand slid down his pajamas, but he found neither pocket nor dollar.

"My clothes are in the next car, berth thirteen. Run get them for me and I'll give you a dollar!"

"Very sorry, sah," the porter replied suspiciously, after a wary look at Smith, "but there ain't no last car. We cut it off at Cheyenne."

"Cheyenne! Why, you fool, we haven't got to Cheyenne yet! We'll be there, though, in ten minutes, and I want to get into my own car!"

"Very sorry, sah, but we cut off nearly an hour ago, when we did all that switching. Guess you must have forgot to change your watch when we changed time at Green River, last evening. That would make you one hour slow."

"What! Me on the way to Denver? In the wrong car! No clothes! No money! Say, come here, boy. Now you get some of those gentlemen who were in here with me, that's a good boy, and I'll give you a dollar soon as I see one of them. Hurry, now."

"What berths, sah, am dey in?"

"What berths? How should I know? Look in all of them till you find them!"

"Very sorry, sah. Can't do that no ways. Everybody's asleep. Can't disturb 'em. How come you in here, anyway? Who is you? Am you the crazy man what got loose in Cheyenne dey am lookin' for?"

The porter backed out the door in a hurry, and locked it behind him.

Smith, mad as a hornet, pounded on the door. This brought both the Pullman and the train conductor. They unlocked the door and at a glance at Smith in his pink pajamas, edged away.

"See here, gentlemen. Just a friendly little game. I was in the other car, the one cut off at Cheyenne, and my clothes are in there. Also my wife and money and tick-

ets—everything. My three friends won all my money, and that's how I'm here in this fix. That's one of them now!" pointing down the aisle to Anderson.

"Do you know this man?" asked the conductor.

"Never saw the poor fellow before in my life," replied Anderson with a pained air.

"Andy, you—you villain! I'll break every bone in your body!"

"Look-out, boss! He's gittin' vi'lent!" gasped the porter as he ducked around the corner of the drawing-room. The conductor locked the door again while word about the "crazy man in the drawing-room" went through the car.

Presently the door was opened a little and a package shoved in. Smith jumped for it with joy.

"What the deuce!" he groaned, as he found a safety razor, and a note saying: "We might be able to recognize you if your head was shaved. Sorry we haven't any clip-pers."

"Of all heartless pirates!" groaned Smith. Then, with a sickly grin, he recalled a certain Pullman car of a year ago, and reached for the soap on the wash-stand. It was something of a hard job, but in ten minutes he had shaved his head as clean as a billiard-ball. And a sight he looked! Then he rapped once more on the locked door.

The first glance the conductors and passengers had of him caused a riot.

"He's the one! That's him! Crazy as a loon! Get that razor away from him or he'll kill himself!"

How they did yell!

"Say, you idiots! Here's your razor if you want it. Now, Andy, make good.

Identify me and let's end this nonsense," begged Smith.

"His own mother wouldn't know him," commented Anderson, as he surveyed the shining pate thrust through the door. This recalled to Smith the same remark, now one year old. He glared at the three friends back in the car, shook his fist, and subsided to a corner and fumed in silent fury.

Meanwhile, the conductor had wired ahead to Fort Morgan for an officer. The



"IT'S ONLY ONE O'CLOCK, AND WE DON'T HIT CHEYENNE TILL TWO."

train was stopped and the country cop was told that there was a crazy man on board.

"I don't want him. Take him along to Denver; good night," was all the satisfaction the conductor got.

By this time it was nearly daylight. The



THEY HANDCUFFED SMITH AND BUNDLED HIM INTO THE WAGON.

conductors considered the matter of putting Smith off the train then and there because he had no ticket, and the Pullman conductor urged that it was against the rules of the company for passengers to travel in a drawing-room without tickets, and especially without anything on but a suit of pink pajamas.

For humanity's sake, the conductors allowed Smith to ride in the drawing-room, merely contenting themselves with wiring the facts to headquarters in Denver and passing the whole matter to those higher up. At the frantic request of their prisoner, however, on the mere strength that after all there might be a mistake somewhere, the conductor wired:

MRS. J. J. SMITH, CAR "ALPINE," BERTH 13,
U. P. FLIER, CARE CONDUCTOR JAMES:

Man on Denver sleeper in pink pajamas, says he is your husband. If so, wire instructions to U. P. headquarters, Denver.

As the train pulled into the Denver station a telegram was handed the conductor that read:

I have just as much husband with me right now as I have had on this whole trip.

MRS. J. J. SMITH.

"Doesn't say much, yet it seems to say a good deal. Depends on how you look at

it," remarked the conductor. Just then the patrol-wagon drew up to the train.

"You've got that escaped lunatic on board, and we can't take any chances," the sergeant said. So they handcuffed Smith and bundled him into the wagon. The three chums sympathetically stood near by and rubbed their hairy heads in unison as the wagon rolled away for headquarters.

Smith was led into the chief's office. His shaven head and

night raiment did not make him look like a man with ordinary sanity.

"Do you know these things?" asked the chief with a grin. Smith struggled madly with his keepers, for there before him on the lounge was all his clothing.

"Turn him loose, boys," added the chief, "he's all right."

Smith dressed. His hat looked too large for him, and felt bigger yet, so he stuffed a handkerchief in the brim to make it fit. Then he opened a note which read:

The gentlemens who is with you done give a dollar to put these in the express-car for you.

ZIGGITY.

Smith sent a telegram to Chicago, and one note to the hotel. The wire read:

MRS. J. J. SMITH, MICHIGAN AVENUE, CHICAGO:

Have played my last game. Forgive me. Home to-morrow night.

JACK.

The note to the three friends read:

You win. Have played my last practical joke. Will expect you at lunch at the Brown.

SMITHY.

"Chief," said Smith, "I'll bet the shirt on my back that game was a put-up job to get me out of the car. That gang of pirates worked a cold deck on me to get even."

"You're dead right," said the chief.

IN THE HORNET'S NEST.

BY DAN DUANE.

The Remarkable Mind and Accomplishments of One Seth Waters, Desperado and Scholar.

SYNOPSIS OF PREVIOUS CHAPTERS.

AMONG the mountains of southern California, lived old Eugene Caillo, gold-miner and miser. To him had recently come his dead sister's child, beautiful, eighteen-year-old Carmita. In the course of events, Philip Garrick, master of the Rancho Buena Vista, visits the store kept by Caillo, and meets Carmita, who is much sought by all the men of the neighborhood, among them being Jim Gormley, superintendent of the Comet mine, a villainous sort of fellow, whose desire is to get at Caillo's riches through Carmita. She repulses him after Philip has declared his love. Shortly after, Caillo's body is discovered at the bottom of a sluice, and suspicion, instigated by Gormley, falls upon Carmita and Philip. Gormley leaves town but is quickly followed by Philip, who has evidence that the former has committed the murder. He finally traces Gormley to Carnullo City, where he has been stricken with smallpox and there, on his dying bed, signs a confession of his guilt. Upon returning to Rosalia, Philip finds that he is suspected not only of old Caillo's death, but also that of Gormley: He decides to marry Carmita at once and take her North. On his way to see the *padre* for that purpose, he is set upon by two men claiming to represent the citizens of Rosalia and delegated to escort Garrick out of town. Escaping from them he takes refuge in the old Mission, and next day, accompanied by the *padre*, he goes to the court-house to clear his name and also report the finding of the body of one of his assailants, and there is mysteriously shot.

CHAPTER XIII.

The Scene in Rosalia.

IN a moment pandemonium reigned in the city of Rosalia. The mob quickly divided itself into the sympathizers of Philip Garrick and the upholders of the man who had shot him. It was impossible, at first, to get to the wounded man, so dense and noisy was the surging humanity that gathered about the court-house steps.

Philip was gradually growing unconscious. Blood was gushing from the wound in his breast. Padre Gregorio was kneeling over him, supporting his head and appealing to the crowd to keep back and give him air.

Two deputy sheriffs rode into the mob. Flourishing their six-shooters, and threatening the life of any man who dared oppose their orders or block their path, they forced an opening to the wounded rancher. When

they reached his side, he was absolutely beyond the conscious stage, and was breathing heavily.

With the aid of Padre Gregorio, Philip Garrick was placed astride the saddle of one of the deputies. His body, seemingly lifeless and limp as a rag, was held upright by one arm of the deputy, for the other was needed in case of interruption—and then the six-shooter would talk.

Padre Gregorio took the horse by the bridle and led the animal in the direction of the hospital. The upraised hand of the priest was the signal for order. The mob stepped aside, and the slow journey to the little white hospital that stood on the outskirts of the city was safely made.

They carried Philip to the operating-room, while the crowd surged outside. Padre Gregorio, his friend in the safe hands of the surgeons, went among the people and begged them not to judge too harshly.

"You have no finger to point against this man except the finger of suspicion," he said.

"That is not what *men* do! He is wounded—maybe—fatally. You must be charitable even as he was charitable to you—and I know that he is charitable, for he is a good man."

"Are you certain?" asked one.

"I know him. I will stake my life and my faith on his honesty."

Further argument drew a majority to Philip's side. Padre Gregorio was the leader of the moment. The leading business men of Rosalia and the ranchers who knew Philip, and were his close friends, asked the priest to do his utmost to keep the crowd in order.

"First, we must find the man who did this," said Padre Gregorio.

It didn't take long to put two and two together.

The body of Dick Bender—the dead man found in the road—the fact that Bender had been the companion of Seth Waters, and the sudden disappearance of Seth Waters himself, turned the tide of suspicion only in one direction.

Seth Waters had killed Dick Bender, and Seth Waters had attempted the life of Philip Garrick.

That was the verdict arrived at by every man in Rosalia, whether he believed in Garrick or not. If Garrick had not been shot by Waters, why didn't Waters come forth?

A posse was formed and began to scour the hills. But Waters, the knowledge of one murder resting lightly on his mind, was sleeping the sleep of a child dreaming of the great city in the North, whither he would ultimately wend his way and be safely drawn into its great vortex.

In a crowded city, he wisely conjectured, he would be safer from capture than on the farthest plains or in the deepest thicket.

CHAPTER XIV.

The Love of Carmita.

WHILE the surgeons were probing for the bullet in the breast of Philip Garrick, a carriage was hastily driven to the hospital door. As the foaming horses stopped, the door opened and out stepped the beautiful woman for whom Philip had exposed his life.

Carmita, the tears streaming down her olive cheeks, rushed with staggering steps up the stairs that led to the hospital entrance. There may have been men in the

crowd then who hated and suspected her as they hated and suspected Philip Garrick; but if they were, they stepped aside to let her pass.

No man could have doubted the anguish that was filling her mind. None could deny that her face mirrored a love so deep and sincere that to have placed an obstacle in its way would have been a sacrilege.

So they stood aside to let her pass. Some of the men who hated her—and there are men who can hate even a beautiful woman—turned their heads away. It was a mark of respect.

"Take me—to—Philip Garrick!" she cried. "Oh, take me—take me to him!"

An attendant supported her and helped her to the operating-room. There, in the dead-ly quiet, the unconscious man lay on a table, his upper clothing cut from his body, the white-robed doctors and the gray-gowned nurses working swiftly in the minute mechanism of their calling, hunting for the lodging-place of the little cone of lead, watching with eager eyes for each faint burst of respiration.

This sad and solemn activity was suddenly rent by a piercing wail.

"Oh, Heavens!" shrieked Carmita. "He is not dead!"

Had not the hands of the doctors been unusually steady, a serious result might have followed.

Two of the nurses ran to Carmita. They caught her arms and held her back. They used brute force to keep her from the operating-table.

She wanted to throw herself on the body of the man she loved, and pour her hot breath onto his fluttering lips; she wanted to infuse her life into his life; she wanted to force her living breath into his almost breathless body. Her strength, augmented by the sight of him lying under the surgeon's knife, almost succeeded in overpowering that of the nurses, but they kept her back.

"Let me speak to him! Let me speak to him!" she shrieked.

One of the physicians turned to her and said sharply:

"You must leave the room, madam. This man is in a serious condition. We must have perfect quiet in order to save his life."

This was more than she could bear. With a cry that touched every heart in the room, she threw her hands above her head and fell in a faint.

It was merciful, because it was necessary

that she be absent from the room. The nurses carried her out tenderly and placed her on a couch in a neighboring apartment.

It took some moments to bring her back to reason. She insisted on going to the man she loved. The nurses forbade, and, to ease her suffering, they told her that the wound was not fatal.

But the doctors had locked the door of the operating-room. They could not brook further interruption. They clearly knew that, to save the life of the man on the table, they would require the greatest silence in order to ply their skill.

The trying nervous hours wore on. In the operating-room, the man who was once the most popular rancher in all the south-land was hovering between life and death. In a room close by the woman he loved, and who loved him better than all else in the world, was slowly going into hysterics because she could not be at his side.

Outside, the populace was wondering if it had not judged the wounded man too harshly. Indeed, even among the lawless element of the ranges, the taking of an unarmed man's life was looked upon with horror. And as that spirit was whispered from man to man, and the facts were weighed to their finest point, even the strongest opponents of Philip Garrick declared that Seth Waters must be brought to justice.

CHAPTER XV.

Something about Seth Waters.

SETH WATERS was a type of the frontiersman that is fast fading into romance. Indeed, it is more than a possibility that one might wander the length and breadth of the West and not find his prototype or anything that approached him.

He was what might be called an educated criminal. The ethics of honor on which most men build their careers were a blank in his mind. Honor to him was only a means to an end. If it occurred to him that murder were necessary to gain a point, he looked upon the consummation of the deed as only another life sacrificed to a purpose.

Seth was close to fifty years of age at the time of this story. He stood nearly six feet in his stocking feet. His health was perfect. The body and brawn of the mountaineer served him well. He could not recall a day's sickness. He boasted that he could eat—and drink—anything, that he feared no

man, that his way was law, and he obeyed that most flimsy of all beliefs—that the world owed him a living, and that all he had to do was to collect it in his own way.

Just where he came from, no one knew. Only Seth Waters could answer that. For some reason or other, he never said much about his origin.

One day he rode into Rosalia on the back of a dusty mule—and he attached himself to the town. In his kindly moments he was an agreeable companion with those who liked him, for he could tell innumerable stories of his escapades and adventures, and a good story-teller in his day was the most popular entertainer in such a quiet commonwealth as Rosalia.

It was noticed by the more cultured people of the town that he frequently spoke the English language in a most perfect manner, although when he was in his cups or playing cards with the cattlemen he would use the most ungainly *patois* of the time and become as ungrammatical as a street urchin.

But what was most puzzling, he had a practical, scientific mind—a mind stored with all manner of useful knowledge regarding chemistry and invention. This was known to such an extent by the people of the little town, that whenever any puzzling matter came to light, the expression, "Send for Seth Waters," was invariably used.

We left him in a valley close to the borders of the River Crood, his tired mare—his stolen but faithful steed—grazing her fill of the succulent grass, while he found a sheltered spot under the trunk of a giant sequoia and was soon asleep.

It was no trouble for him to sleep. Conscience is the last thing in the human compound to find surcease in repose; but when the human compound is devoid of all manner of conscience, sleep is merely a part of the daily routine.

When Seth Waters awoke, the sun was already high above the hilltops. The crisp, clear air, laden with the tonic of the pines, put life into his veins and touched the edge of his appetite. His first glance was for the mare. He saw her still grazing. Something invisible told her that her master was awake, and she turned her head in his direction and neighed.

"All right, old girl," said Waters, straightening himself up, "I'll be with you soon."

He scrambled down the bank to the river, tore off his clothes, and plunged into the

cool water. Back and forth he swam, the great, long strides of his powerful arms and legs making a mighty wake that reached to the opposite shore.

Out in the middle of the river he stopped, and, as he treaded the water, he lowered his lips to its level and drank his fill.

That would have to be his meat and drink for hours, maybe. He knew that man can live longer on water than on any other bodily sustenance, and with his customary philosophy he drank till he could drink no more, then smilingly said: "This will keep me for a while."

Swimming back to the river's bank, he stood on a dry rock in the hot sun until every drop of water had evaporated.

"These sun baths are fine," he said to himself; "so invigorating—and a good flesh rub," he continued, as he plied his hands over his body, "is the best way to create a perfect respiration, and perfect respiration is one of the secrets of good health."

Thus he mused as the sun sapped the last drop of moisture, and he slowly put on his clothes. Walking over to the mare, he patted her neck fondly. In a few moments he was on her back and riding away.

He headed for the north—at least in the direction that he surmised to be the north. He followed the river patiently and slowly until he came to a point where the bluffs on either side were so high that he could not master them.

It was impossible to follow the bank—for the bank and the bluff were one.

His intention was to go around the bluff and strike the river at a more favorable point. With this in mind, he turned the mare's head and started into the chaparral. For hours he rode, but there was no opening. Only a great forest enveloped him. There were naught but trees on all sides, with birds in innumerable quantities, unbroken ground that had never before known the tread of a horse's hoof or the foot of a man.

He kept on and on. Once he stopped at a spring to let the mare drink and eat. He drank and ate, also, his food being the wild blackberries that grew in profusion, and the eggs of a wild-fowl which he had come across in a ground-nest, and which he devoured raw.

His hunger appeased, he began to think. In short, he was getting serious—very serious.

He looked at the sun, he examined the trees, and hunted for animal trails and other

signs by which the hunter is guided—but he was in a wilderness.

With perfect calm, with a mind attuned to the position into which he had thrust himself, he said, half aloud, to the mare:

"We are lost."

He mounted and rode on.

Night came—the deep, black night of the silent forest, when every rustling leaf sounds like the footfall of death. Just as the last spear of sunlight threw a shadow across the treetops, he reconnoitered for water.

He was thinking of the mare—not of himself. There was no water in sight. The grass seemed plentiful, but water was more important to his mount than grass just then. The absence of it troubled him, but there was nothing else to do but stop for the night.

He staked the mare to a tree. With his hat for a pillow, he stretched himself on the ground. He could have fallen asleep, but he wanted to think. Just where he was on the face of the earth was what troubled him most. He thought that he knew the surrounding country pretty well. There was no other answer to it—he was lost.

In the morning he awoke early and rode on and on—and still on. He emerged from the forest and found himself on a sandy plain stretching far to the hills before him.

CHAPTER XVI.

Death Valley.

DEATH VALLEY is a low desert in Southern California near the Nevada border-line. It was christened by the survivor of an emigrant party of thirty, who, late in the year 1849, lost its way while traveling through it.

After enduring indescribable sufferings, eighteen perished in the sands. There is no other spot on earth of a similar nature.

Like all the great valleys of California, it lies oblong, running from north to south. It is about fifty miles long and some thirty-five miles wide, and its surface is about two hundred and ten feet lower than the level of the ocean.

The Panamint Mountains on the west rob it of the moist winds of the Pacific Ocean. In the middle of the summer its atmosphere contains less than one-half of one per cent of moisture. Its surrounding country is a succession of volcanic ranges that form a border of color—black, red, green, yellow, and brown—giving the dried-up place a most

picturesque setting, and furnishing the valley with the beds of borax—the only thing that has made it of any value.

Death Valley, as seen from the summit of the Panamint range, is a long gray waste of desert, traced with narrow bands of white. These are the thin deposits of borax. To the south, one may see a narrow band of a steely color. It looks like a sword-blade. This is the Armagosa River as it dies away and sinks into the thirsty sands on entering Death Valley. It is a sluggish stream. It flows lingeringly along, as if conscious of the death that awaits it, until absorption and evaporation take it all.

The land was the center of a system of lakes when the Sierra Nevadas had not yet risen. Toward their summit, the Panamint Mountains are of carboniferous limestone formation, rifted and worn, with a slight growth of trees. Some are wonderful pines, others are mahogany and juniper. Near the crests and below, the vegetation becomes more scarce.

In the gorges and narrow cañons are numerous vines and creepers, on which grow wild gourds resembling oranges, similar to the bitter desert-apples that grow near the site of ancient Sodom. Here, also, are the most distorted forms of the cacti, and an inferior growth of greasewood or palaverde.

A sand-storm playing in Death Valley is a wonderful sight. Sand-augers rise like slender stems, reaching up into the burning atmosphere for thousands of feet, and terminating in a bushy cloud. They travel hither and yon, and gradually fade from sight.

Here mirage raises up spectral cities, and groves and fields and tree-margined rivers. A low ruin will seem to be hundreds of feet high; arrow-weeds are magnified into stately palms; and crows walking on the ground appear as men on horseback. Besides the crows, there are seen a few poor, lean jack-rabbits, a scattering of mangy coyotes, some hungry buzzards, horned toads, red-eyed rattlesnakes, and, in the Panamint range, there are still a few bighorns or Rocky Mountain sheep.

At the summit of the Panamint and Funeral Mountains, the thermometer falls to thirty degrees below zero. The mineral wealth of this region is great. In the Panamints are mines of antimonial silver-ore, and copper, gold, iron, travertine, onyx, and marble. In the Funeral range, gold, silver, lead, copper, and antimony have been found in paying quantities, while the thick strata of

the east and southeast hills show almost inexhaustible quantities of colemanite, a borate of lime named for William T. Coleman, a San Francisco merchant, who was one of the first to discover this deposit and its richness in borax.

Very rich gold quartz has been taken from the mines along the route traveled by the ill-fated emigrant parties that dared its terrors.

CHAPTER XVII.

The Want of Water.

DARKNESS brooded over the face of Death Valley. Star-sprinkled black above; sand, salt, and dust below; silence without motion. This is night over the miles on miles of gasping ashes of the valley. A withering fiend, a world without water, Death Valley dries life to bones, bones to chalk, chalk to dust. Dust we are and to dust return is the alpha and omega of earth's most hideous ash-heap.

Night rose like a curtain of black velvet; dawn, a faint streak along the uncertain horizon, trembled upward and turned to pearl; morning blushed, glowed red, flamed scarlet, and suddenly paled; the sun rolled above the sky-line, a dazzling, blinding burst of incandescent white.

Under the gathering heat, Death Valley began to writhe and glitter like the sea. Those level miles of salt and sand rippled and sparkled like jeweled waves.

Death Valley is the sea—the sea without water—a gigantic, unreal sea, where the cloud and the fog and the mist are dust, where the spray is sand, and the spume is alkali, and where the billows are rock.

Alike to those who go down to the sea in ships and to those who go forth over the desert, life is spelled in the one word—water.

As the sun melted the eastern horizon and even the shadows fled to the west, Death Valley awoke from the soft, dim cruelty of the night and squirmed, just as it has each morning for untold ages, into laughing torture for every living thing, gleefully disdainful of everything but the hand of God—yet, sometimes at long, rare intervals, conquered by man.

When the sun arose on this particular morning, Death Valley smilingly gloated over a man stretched near to death, who for three days had been in its waterless grasp.

Three days before he had left Lone Rock,

seventy miles away, riding a roan mare, packing his own water. Risking all, even life itself, he hoped to find more water in Forty Skull water-hole; but no rain had fallen on Death Valley for many months, and Forty Skull was dry.

Forty Skull was not only dry, but baked and cracked. At the sight, the night before, the tottering mare had swayed for a moment and then stumbled, nose first, into the sand—and died.

The man, Seth Waters, had drawn his six-shooter against himself—for in Death Valley suicide is no crime—then, with one last, wild hope, he had taken to the trail on foot in the coming dark, hoping that he might meet another traveler in that dismal waste—who had water.

But there was only one chance in a thousand!

The night had worn on and on, and out into burning day again—and Seth Waters lay, babbling idiotically, in the dry shadow of a rock.

Death Valley laughed in its radiant way. Another victim to the millions of living things whose bones it had bleached and dried to dust for ages.

Even birds in the air dropped to the frying sands, panted a moment, then died, dried, and were blown away.

Only the buzzards showed animation. At first but dim specks, they were beginning to slowly circle over the dying man below. Over all Death Valley the man and the buzzards were the only signs of life—except a creeping speck of white where the trail cut the hot sky-line.

Slowly crawling, drawn by two weary horses, came a prairie-schooner, canvas-covered, followed by a staggering cow tied to the tail-board. In the wagon were an old man, two boys, and a young woman.

An hour passed. The man in the sand, his lips crusted with dried froth, lay still, face down. The wagon slowly creaked along the trail until it came abreast of him. Then it stopped.

"Father," spoke the woman, "see!"

She pointed with a whip to Waters, stretched beside the wheel-ruts.

The old man looked down from the wagon and said: "No."

The woman drove on. Suddenly she drew the rein, reached into the wagon, filled a tin cup with water.

Stepping from the wagon, she went back to Waters and held it to his lips. He hardly

drank. The water seemed to soak into his cracked throat, instead of being swallowed.

"Wa-water!" he gasped. "Water!"

"I can spare no more," answered the woman. "Perhaps I do wrong to let you have even this, and by doing so may be robbing my own boys of life itself.

"Where can we find water?" she continued. "We have been short for two days; the team had their last water yesterday. Which is the way to Forty Skull? There is always water at Forty Skull, they told us. Where is Forty Skull?"

"Forty Skull is dry," whispered Waters. Then he reeled to his feet, looked at the woman with bloody eyes, and demanded hoarsely: "Have you no water?"

"Five gallons, with two boys, my father, the team, the cow, and myself to drink."

She paused a moment, and then continued:

"It is seventy miles to Lone Rock on the back trail, and I know there is no water between here and there, for I have just come that way—

"Sixty miles from High Heel Cañon, where we left four days ago, and every water-hole dry on the way," echoed the woman.

Then that man and that woman looked at each other, not as man is wont to look on woman, nor woman on man, for in each of them was the same thought!

Twenty quarts of water for five people—no more within fifty miles—and Death Valley.

CHAPTER XVIII.

The Mother of Invention.

BUT a man will fight for a woman when he will not fight for himself. Seth Waters silently put forth his hand, raised the woman from the dry dust of the trail, and led her back to the wagon.

"No water—Forty Skull dry," was all she said to her father, who took the death-sentence as the old do—calmly.

The boys, seized with the terror of the sands, began to whimper. By brute force Seth Waters grasped the water-can—but did not drink. Turning to the woman, he said thickly:

"With this I could get to Lone Rock or High Heel, but one thing prevents—I am a man. I'll stay here with you. Let me think—let me think."

His eyes roved over the contents of the wagon. Then they swept the horizon.

"Not a cloud—not a cloud. Not one for months. Yet right here sometimes the heavens spill—why not now?—water—water—water! In the middle of Death Valley—no rain for months. Let me think," he rambled on.

Waters doled out a cup of water to each, and washed out the mouths of the sweltering horses. Then he once more overhauled the wagon-load and, with his eyes riveted on the panting cow, sat down to think.

He had a problem to solve, the problem that men have faced ever since man has been on earth, a problem before which millions of men have failed and, because they failed, have died.

Seth Waters sat there that hot August morning amid the terrific beauty of the desert, looked at what were now his people, looked at the suffering cattle, looked out over the thirty miles of withering sands, up into the merciless sky, and groaned.

"Water!" he coughed. "Water!"

The woman was praying aloud, but for years prayer had been a forgotten tongue to Waters. In the light of his twenty years of frontier experience, he gazed dully at the kneeling woman and muttered: "Labor is the only prayer that is ever answered."

Then he fell to thinking once more, and his fevered eyes centered again on the cow.

"Milk?" he mused. "Without water for two days, you have no milk. Even a barrelful would not save the horses. And without them, water or no water, what is the use? Wring water from Death Valley!"

The thought thrêw him into a shiver of grim, silent laughter—merriment that is not good for man to know, for it borders close on that of the maniac.

"But you have blood," he continued, still speaking to the cow. "But of what use is that? I've seen it tried before, and it means only a harder death. This is better," and he tapped his six-shooter—patted the hip-weapon with that rare affection known only to the Westerner.

"But in that hide of yours is water, several barrels of it; nine-tenths of you is water. How—how? Ugh!"

Waters arose and once more looked into the wagon-box. Then he began to unload. He tossed out a copper wash-boiler and, with a derisive laugh, threw out a pump and parts of a windmill. Then he kicked the two empty water-barrels, one on each side of the wagon. They rang hollow to his boot-toe. Lastly, he threw onto the sand several

lengths of iron pipe, also parts of the wind-mill.

"What have you got all this stuff for, here in the heart of Death Valley?" he asked of the woman.

"We lived in Kansas," she answered listlessly, as recalling a dream, "my husband and I, and he died. I took my two boys, here, and my father, and what of the old home I thought we might need in California, and started on again. That was part of it—I brought it along, for 'twas all we had."

Then Waters did something that to the others seemed the outcome of an insane mind. First he cut the wagon-box to pieces—reduced it with the ax to a wood-pile—and told the boys to collect withered sage-brush.

He rigged the iron pipe to the copper wash-boiler by punching a hole through the cover and pounding the metal tight about the iron pipe. The pipe he led into one of the empty water-barrels.

From the boiler, set two feet off the sand on four stones, to the barrel was slightly down-hill, for the barrel rested on the ground in a hole Waters had dug with the ax. Between them reached the iron pipe for twenty feet. Then he tried the pump, but the leather washers inside were dried and warped—useless.

Risking half a cup of the priceless water, he soaked it, so that it held air-tight when he tried the pump.

"So far, so good," he said to the woman, who answered with a wan smile, not understanding.

Then he slaughtered the cow. The hide he cut into long strips, and then sewed them into a long, six-inch bag, or pipe, of green rawhide surrounding the iron pipe. It was burning noon now, but Waters did not stop. He again dealt out a cup of water all around, even to the horses.

The second water-barrel, still air-tight though nearly dried out, Waters covered with air-tight rawhide and made two connections, one with the pump and the other with the rawhide bag.

With the wood from the wagon-box, he started a fire under the copper boiler, and put therein a huge chunk of meat from the carcass that lay on the sand.

The cover of the boiler he now loaded down with a heavy stone. As the fire gained, a smell of cooking, then burning meat, came faintly, then gushingly, from the end of the iron pipe that emptied into the water-barrel.

Meanwhile, Waters had the two boys

pumping with might and main, forcing air into the closed barrel, thus condensing it. When the air-pressure was nearly bursting the rawhide cover, he stopped pumping.

He put his bare hand to the wood, and jerked it away instantly. It was nearly burning-hot, but it cooled as the meat in the boiler turned to vapor.

It could not burn, for it had no air, and as the steam ran from the boiler through the iron pipe into the empty barrel, Waters let condensed air expand from his covered barrel into the rawhide bag surrounding the pipe, cooling it and condensing the vapor, which fell, drop by drop, from the pipe into the empty barrel.

What he had done was to rig out, from a wash-boiler, two pieces of iron pipe, two barrels, a green rawhide, and an iron pump, a rough but practical distillation plant, cooled with condensed air.

Hour after hour this went on, and trickle, trickle, slowly the empty barrel filled with an unpleasant but drinkable water as the meat of the cow and the wood of the wagon grew less. The cow weighed over a thousand pounds, and living flesh is four-fifths water.

The afternoon wore away, the sun set, night came down, but the still dripped on.

When morning broke again over Death Valley, not a living thing was there but a cloud of buzzards fighting over the bare bones of a cow. On the horizon to the west, along the trail toward Lone Rock, a white speck flashed back the morning sun, and disappeared. It was the prairie-schooner, drawn by two revived horses, and on each side of the wrecked wagon-box was a partly filled barrel of water.

As the wagon vanished and not a living thing was to be seen on the face of the desert, a cloud gathered in the north, loomed high and black, and for the first time in many months rain descended in a flood over Death Valley.

On the end of the wagon, his long legs trailing over the tail-board, sat Seth Waters. He was thinking of his feat, and, silently, he was congratulating himself.

And well he might. It takes a man of more than ordinary mind, his being racked by thirst, to accomplish such an undertaking. But Seth Waters, though a scoundrel, a horse-thief, and a blackmailer, was possessed of that rare gift—a mind.

(To be continued.)

BOYS FACE DEATH ON ENGINE PILOT.

THREE young boys whose homes are in Albany, New York, had a fast, furious, and dangerous ride recently on the pilot of a locomotive of the North Adams Express.

The boys who are Charles Child, twelve years old; Thomas Funk, fourteen years old, and Albert Marsh, sixteen years old, walked from Albany to Chatham over the Boston and Albany Railroad, a distance of twenty-one miles, where they expected to jump a freight-train for New York. They boarded several freight-trains, the crews of which put them off. They then concluded that they would walk down the Harlem tracks to some station where they might be able to board a train without being noticed.

They reached the Hillsdale station at about the same time as the North Adams Express, driven by Engineer Thomas Brissett and in charge of Conductor George Marley, arrived. The three

boys were standing against the fence on the opposite side of the station, and as the train came to a standstill they ran alongside of it to the front of the locomotive, where they climbed onto the pilot and sat up close to the boiler-head.

It being dark, they were not noticed getting on the locomotive. The train ran at a sixty-five-mile-per-hour rate to North White Plains, a distance of ninety miles, without a stop. The North Adams Express changed locomotives at this point, where the electric zone begins. The engineer ran his locomotive into the roundhouse.

In going to the front of his locomotive he discovered the three boys huddled on the pilot, almost unconscious from the severe winds they had encountered in the ride of ninety miles. He took them off and helped them into the engine drivers' quarters, where they had food and were warmed up.—*New York Evening Sun.*

The worst workman and the best engine are alike in one thing,—
neither will go without being fired.—The Roundhouse Foreman.



On the Middle-West Main Lines.

BY JOHN WALTERS.

IT is good to know that the railroads, the bulwark of the entire industrial world of the Western Continent, are showing an increase in earning power notwithstanding the economies and regulations to which they have been subjected during the past three years by, perhaps, a too severe legislation. We present here a budget of information concerning the lines of the productive Middle West, and some other topics of keen interest to all who want to keep abreast of the railroad situation.

Why There Is Such a Shortage in Cars — Activity in Freight — More and Larger Moguls and Mallets—The Growth in Illinois—Recent Earnings.

ALL of the railroads, and especially the coal-carrying roads of Ohio, are being threatened just now with a car shortage such as has never been known before in this country,

“a prominent traffic official declared recently. “The railroads are threatened with a car shortage, and the country is facing a coal famine—both of which are certain to come this winter if present conditions cannot be changed and the future situation relieved.”

Authorities in the coal trade who have been making a careful investigation say that the coal supply for the coming winter is now short by over twenty million tons in the United States, and that, so far as can now be seen, there is no hope of bring-

ing up the supply to normal conditions at this season of the year.

The suspension of coal mining in the States of Illinois, Kansas, Missouri, and Arkansas, owing to the failure in setting the mining scale until September, will cause a heavy shortage in the territory supplied by the mines in those States and, also, in the other coal districts where mining was in operation.

Because of this, the latter districts will be unable to take care of the future demands because the supply will be drawn too heavily upon by the general market.

The fact that the coal mines in the States mentioned were closed down until recently is one of the many causes of the present situation of a threatened car shortage. During the summer months the coal mines which

were being worked in Pennsylvania, Kentucky, and the Virginias were operated to full capacity. The product of these mines was shipped to points far distant.

Many of the cars in which this coal was shipped have never been returned to the roads where the traffic originated and which own these cars. This condition has already made the car shortage evident. In the district tapped by the Hocking Valley, the condition is acute.

General Manager Connors of the Hocking Valley was obliged to send letters to the general managers of all the roads which connect with the Hocking Valley, explaining the situation. He requested that all Hocking Valley coal cars be returned to that road as fast as they are emptied.

Activity in Freight.

The almost unprecedented activity in the freight movement all over the country has pressed into service every available freight-car and the railroads are finding it hard to meet the demands made upon them. During each month of 1910, business showed an increase over the corresponding month in 1909.

A peculiar phase of the Western freight shipments, and they form the bulk of the increase, is the destination of the consignments. Until this year, the lower Pacific Coast points and the Middle Western States received a majority of the freight. During 1909, however, northern Pacific Coast points in Washington, Idaho, Utah, Montana, and Wyoming have been the heaviest receivers. The lower Pacific Coast points have not fallen off in their demand, but the newer settled country is demanding a greater amount of construction material and manufactured goods than its sister country needs.

The shipments from the West to the East have also increased. Little manufactured material is sent east, the bulk of the shipments, consisting of hides, leather, fruits, imported materials from the Orient, and, strange to say, dynamite and blasting caps. These explosives are shipped in large quantities, a California concern supplying most of the big manufacturing concerns in the East.

Of all objectionable freight from the shippers' point of view, high explosives probably stand at the head of the list. The national inspection bureau, which

designates the manner of shipping this variety of freight, has decreed that it shall be sent only in cars of a certain tonnage with steel supporters, packed in a certain manner, with no inflammable material in the car. The car must be liberally tagged with the announcement that it contains explosives. Handling and transferring a car-load of percussion caps, giant powder, and dynamite is not the most pleasant task in the world.

Largest Engine Built.

Two of the largest type of locomotives ever built have been received by the Duluth, Missabe and Northern Railway. The monster machines are, in reality, two locomotives in one, and are designed to have a larger hauling power than any other two engines ever used on hill runs. These engines will pull up a steep grade seventy empty cars, where the best done by the ordinary locomotive now in use by the company is twenty-eight cars.

Each locomotive tips the scales at about six hundred and sixty thousand pounds. A double set of cylinders, -a high-power near the center, and a low-power set in front, operate the sixteen monster driving wheels. Each set of cylinders operates four driving wheels on each side of the engine.

The boilers, which look like monster cylindrical tanks, furnish a pressure of two hundred pounds of steam.

It is not expected that the Moguls will eat up more coal than is now consumed by ordinary locomotives used on hill runs. All the latest designs of machinery have been installed on the engines to get the greatest amount of power from them for the least amount of fuel.

The engines are ninety-two feet long from the pilot to the rear of the water-tank. They have been numbered 200 and 201.

Still Larger Locomotives.

"It is probable that within a few years we shall see a five-hundred-ton locomotive." This statement was recently made by the superintendent of motive power of one of the largest railroad systems in the country. "I can say that it is more than possible."

"It would mean the expenditure of many millions of dollars to strengthen the bridges and road-beds of our road, but I would not be surprised to see such an engine soon," says the superintendent of motive

power of another great railroad. "The engines we now have are capable of hauling trains as heavy as we are allowed to take into Chicago, but in railroading, as in everything else, the man who tries to set a limit will find himself outgrown."

There is in service on the Santa Fe road, a freight locomotive which weighs 462,450 pounds, about 231 tons. It created great wonder when it was brought out a year ago. Yet designs are already being drawn up by a Western road for a locomotive that will exceed it in weight, and a few months ago there was delivered to the Delaware and Hudson Railroad one that exerts a pressure of 441,000 pounds on the driving-wheels alone.

Fifty More Mallets.

The great Santa Fe engine exerts a pressure of 412,000 pounds on the driving-wheels that counts. One of the features of the new Delaware and Hudson locomotive is the absence of the small trucks and the placing of the entire weight on the driving-wheels. The advisability of this innovation remains to be proven.

The Santa Fe has placed an order for fifty additional Mallet engines, for delivery at the earliest possible date. Several of these new monsters will be assigned to the Gulf lines. Increasing business from year to year and gradual growth in loading requirements demand these locomotives of more power.

In fact, these exactions are growing so stringent that the Santa Fe people have placed an experimental order with the Baldwin Locomotive Works. This calls for a duplex locomotive, designed by J. W. Kendrick, Vice-President of the Santa Fe. It will be an important experiment, which, if successful, will revolutionize present transportation problems of railroads, and reduce present rate schedules.

By Rail to Hudson Bay.

The construction of the Hudson Bay Railroad will be pushed again as soon as cold weather sets in, and it is hoped by next spring to have over half the trackage finished. For over a year, the road has extended as far as La Pas.

The Hudson Bay line will be one of the greatest stimulants the great north country will have. It will serve a double

purpose. Firstly, it will shorten the distance between the producer in the far north of Canada and the consumer in England by making a great all-water route from Fort Albany on the bay to Liverpool. Secondly, it will take much of the Canadian traffic off the lakes and give over many great steamship lines to American traffic, which it needs just now.

Ten new oil-burning locomotives for the western division of the Hill roads will be delivered soon, and will go on the Spokane, Portland and Seattle, where they will be used with fifty others already there. The company will begin work meanwhile on changes that will convert many of the coal-burning locomotives into oil-burners. The Oregon trunk lines will also be supplied with oil burners. President John F. Stevens, who heads the Western Hill lines, is a believer in oil-burners from the standpoint of economy, in view of the California base of fuel supply.

The Claim of Illinois.

Illinois now claims to be the premier railway State. It claims nearly 13,500 miles. This includes the electric railways. The steam railroads, already in operation in 1908, according to the report of the Interstate Commerce Commission, totaled nearly 12,000 miles. In addition to these lines, various important new lines and extensions have been built, bringing the total up to the above figure.

The record is approached only by Texas and Pennsylvania. The Lone Star State, by reason of her vast prairies and interminable distances, has the largest mileage, possessing at the latest official reports 12,847 miles of railroads. Pennsylvania is the only other close competitor, with 11,891 miles of track.

A comparative statement of the railroad mileage in the various States of similar class shows as follows:

Illinois.....	13,500
Texas.....	12,847
Pennsylvania.....	11,241
Iowa.....	9,241
Michigan.....	9,011
Ohio.....	9,131
Kansas.....	8,948
New York.....	8,416
Minnesota.....	8,407
Missouri.....	8,022
Wisconsin.....	7,556

Illinois seems to be the point of radiation for all the greatest railway systems of the continent. Chicago, Peoria, Springfield, Quincy, East St. Louis, Decatur, and Rock Island, are all gateways of commerce opening to great fields of business on every hand. Western terminals of the Pennsylvania; the New York Central Lines, Baltimore and Ohio, Wabash, Grand Trunk, Nickel Plate—the arteries of travel between the Atlantic and the lake regions—are centered in Illinois. The eastern terminals of the great systems that link up the Middle West with the Far West,—the Burlington route, the Rock Island, the Milwaukee, the Northwestern, the Frisco, and the Santa Fe,—are all within the borders of the State. The northern terminals of the lines running between the North and the South—the Illinois Central, the Southern, and the Louisville and Nashville—are in Illinois cities.

Chicago is the greatest railroad center in the world. The commerce which passes through that city every year is stupendous.

Burlington Leads All.

The Burlington Route, with its 1,700 miles of track, leads the list in mileage. The Illinois Central comes second with 1,356 miles of busy road; the Big Four, third, with 950 miles; and the Chicago and Alton, fourth, with 750 miles. The mileage of the various lines in Illinois exclusive of terminal lines and those which merely enter the border of the State, is shown by the appended table:

Chicago and Alton.....	750
Santa Fe.....	237
Baltimore and Ohio.....	365
Chicago and Northwestern.....	450
Burlington.....	1,683
Great Western.....	168
Chicago, Indianapolis and Louisville.....	325
Milwaukee.....	415
Rock Island.....	322
Big Four.....	950
Frisco.....	491
Illinois Central.....	1,356
Iowa Central.....	191
Lake Erie and Western.....	122
Wisconsin Central.....	61
Mobile and Ohio.....	154
Southern.....	151
Clover Leaf.....	165
Vandalla.....	346
Wabash.....	472
T. P. and W.....	237

Besides the magnificent systems of trunk lines that traverse the State, the entire populous area is served by a crossing of branch lines, stubs and belt and terminal roads, which give a freight and passenger service unequaled anywhere. The suburban service, which has grown to be a factor of the greatest importance in transportation, has been removed from the general field of train operation and made a distinct feature of railroading, thus giving better service in both departments of travel.

Better Equipment Now.

Illinois has witnessed a vast improvement in the quality of her railroads during the last ten years, as well as a substantial increase in the quantity. In addition to the improvements required by the State and interstate laws, the more prosperous roads have entered into a rivalry in track improvement, operating equipment and betterment. The block signal, the telephone system of despatching, the improved road-bed, the construction of new stations, the automatic coupler, the constant increase in the size of locomotives and elaboration of traveling appointments, have all combined to put the Illinois lines on a high plane of excellence.

Mr. Yoakum's Optimism.

B. F. Yoakum, chairman of the Frisco lines, like nearly all the prominent railroad executives, is unusually optimistic. He never tires of telling Eastern capitalists about the wonderful resources of the South and Southwest, and few men can discuss important questions more convincingly than he.

In a speech at the Oklahoma State Fair recently, Mr. Yoakum had for his theme, "Wagon Roads and Railroads." He said that the founders of this government had no conception of the vast commerce interests which would move over 235,000 miles of railroad, instead of the little which then dragged over a few miles of bad wagon roads. This was no reason, however, why this new development should be treated in any sense as lawless, nor is there any reason for attempting to arrest it because it requires a readjustment of Federal and State jurisdiction. As the commerce between States expanded and as transportation was extended, a far-reaching, con-

nected, and interdependent industrial system was created, and this must be subject to some system of law.

"But, after all," said Mr. Yoakum, "this thing called interstate commerce and these instrumentalities called railroads represent the very vitals of our national progress and the very health and wealth of our whole people. The people of the country, instead of being aroused by inflammatory appeals to adopt measures to destroy them, should be taught by enlightened discussion to find some way to promote them and, at the same time, fairly regulate them."

Increased Railroad Earnings.

Record earnings and record expenses are shown by the Interstate Commerce Commission's monthly reports of income returns of the railways of the United States for the year ending June 30, 1910. Compared with the previous banner year, 1907, the earnings show an increase of \$190,141,290, and the expenses an increase of \$92,609,953, leaving \$97,531,337 increase in net income from operation to take care of an increase of \$23,321,000 in taxes and the interest on at least \$2,000,000,000 new capital invested in the railways since 1907.

Between the high water marks of 1907 and 1910 occurred the greatest slump in operating revenues ever known in the history of American railways—the descent to the bottom in May, 1908, and the slow recovery from which is shown in the following statement of earnings by months and half years for the past three years. Unfortunately, no official figures by months are obtainable prior to July, 1907.

More significant than the splendid recovery of 1910, or than the totals for 1908 and 1909, are the figures for the half year ending June 30, 1908. These are \$317,835,614 below the earnings of the preceding half year, and nearly \$300,000,000 below these for the corresponding months of 1910, with which they are more properly comparable. The six months from January to June, 1908, is the "mildewed ear" that for the past twenty-four months has blasted and infected wholesome railway operations in the United States.

In following the rapid increase in gross earnings, the public has lost sight of the burden of forced, and sometimes false econ-

omies the railways have had to bear as a result of what happened to them in the winter and spring of 1907-1908.

While the figures for 1910 are not properly comparable with those for 1907, owing to changes in methods of accounting prescribed by the Commission, they are sufficiently so to enable the student to note the sag in the two essential departments of maintenance between 1907 and 1910. In order to appreciate this at its true value, it is necessary to recall that between 1897 and 1907, the charge for maintenance of way and structures increased from \$159,434,403 to \$343,545,907, or well over seven per cent annually. Instead of such increase, the table shows a decrease for 1908 and 1909, while the larger figures for 1910 are very far from showing a normal increase over 1907.

The figures for maintenance of equipment in a lesser degree show the results of the enforced economies of 1908 and 1909. Between 1897 and 1907 expenditures for equipment rose from \$122,762,358 to \$368,061,728, or nearly twelve per cent annually.

Any corresponding increases between 1907 and 1910 would have necessitated an expenditure of at least \$415,000,000 for maintenance of way and structures, and \$500,000,000 for equipment in 1910, without providing anything for the deferred expenditures of 1908 and 1909.

That there is nothing speculative or unwarranted about these percentages of increase in expenditures for maintenance is demonstrated by the fact that, in 1907, the railways carried 126 per cent more passengers and 148 per cent more tons one mile than they did in 1897, and the traffic congestion in 1907 demonstrated the inadequacy of the decade's expenditures for equipment, road and terminal facilities.

Mr. Harahan's Retirement.

With the passing of James Harahan from the Presidency of the Illinois Central Railroad, which must take place not later than January 12, 1911, through the operation of the pension system, there will come the close of one of the most strenuous and interesting careers in the history of American railroading. Mr. Harahan will be seventy years old on January 12.

"Of course," said Mr. Harahan, in speaking of his retirement, "I feel deep re-

gret that I have arrived at the age where I must retire, but I suppose every man must feel the same. My deepest regret is in having to leave the men with whom I have been pleasantly associated so long. I have given the best of my life to the railroad service and have taken great pride in seeing the Illinois Central grow from 2,875 miles in 1890 to 4,550 miles. During that period it has increased its yearly earnings from \$17,881,000 to \$62,000,000."

Mr. Harahan's first railroad job was a clerkship with the Boston and Providence road in 1860. One year later he joined the First Massachusetts Infantry and served three years in the Civil War. He reentered the railway service in 1864, when he took a position in the shops at Alexandria, Virginia.

Although Mr. Harahan refuses to talk about his success, his ability to do most of the things that he insisted others in the operating service should do contributed largely to it. W. L. Park, his probable successor, was taken from the Union Pacific, where he was general superintendent, and was made vice-president of the Illinois Central early in the year.

Railroads Teaching Farmers.

The railroads are teaching the farmers to make two blades of grass grow where only one grew before.

In some States the agricultural schools are working hand in hand with the railroads to teach the latest and best methods to the farmers, almost at their own farms, by using cars as traveling laboratories, lecture-rooms, and museums. A writer in the *Farm Press* says that the farmers need this sort of instruction badly. He quotes Commissioner Coburn, of the Kansas State Agricultural College, as thus defining what he calls "the crime of agriculture":

"The average yield per acre is a disgrace. The farmers are not seizing the opportunities among which they are thrust, they are not doing justice to the land and climate with which a generous Creator has endowed them. When they realize how much more per acre can be produced by only a little additional labor and at no great additional expense, and when they meet the soil and climate half-way, then the farmers may be truly proud of their achievements."

Commenting on this, the Chicago farm paper goes on to note that the farmer did not take advantage of the work of the agri-

cultural colleges until the experts decided to "take the mountain to Mohammed." In the meantime, we are told the railroads began to realize that they were not getting the freight they wanted, and they decided that the crops would have to be increased.

At first, corn was the subject tackled, and "Corn Specials" were sent out to enlighten farmers on the breeding and selection of corn, its cultivation and harvesting—in fact, on every wrinkle of corn culture that leads to an increased yield and better quality. Stopping at towns and villages, hamlets and way-stations, they were met by many farmers who could manage to take off the few hours necessary to visit the train and hear the lectures, but to whom a trip to the State Agricultural College had seemed like the Mohammedan's journey to Mecca, a thing to be performed but once in a lifetime, if at all. The farmers had, by the way, been duly notified beforehand as to the exact hour of stopping so that they lost no more than they had planned to give. Already results are very noticeable in many sections by the increase per acre yielded in the last two or three years. But this contact with the farmers in their own locality only emphasized the need in the minds of experts for instruction on all branches of farming, and it was not long before the "Dairy Special" was going its rounds, to be followed later by trains covering other subjects.

Prominent among the roads which have been, from the start, especially active in this work are the Northern Pacific in the West and the New York Central lines in the East, and this year they took a long step in the march of progress when they put on their "Better Farming Specials," made up of trains of cars in each of which some one branch of farming is treated. The Pennsylvania Railroad has instituted a similar service in the territory which it traverses. As one observer expressed it, these trains cover everything from the "kitchen to the pig-pen."

The plan of procedure is to have a meeting between the farmers and lecturers in the town hall at a stopping-point, if it has one.

After the "lecture," the crowd is taken through the train in detachments, and a demonstration lasting eight or ten minutes is given in each car. As one party passes from the first car on to the next one, another party enters the car they vacate, and in this way there are eight or ten demonstrations

going on continually in the train, which remains from three to four hours at a stop.

However true the charge against the farmers may be, as regards their failure to make the most of their opportunities in the past, they are proving by their attendance upon the "Farm Specials" that they are men of intelligence and willing to employ progressive ideas when once they have had the chance to acquaint themselves with such.

They are meeting these trains by the hun-

dreds and thousands, and showing an enthusiastic interest in whatever the experts have to show them. So far as they have had the chance to put the knowledge thus gained into practise, a large percentage of them have done so. With the coming of another spring and harvest-time, they will place tangible results before us in proof of the claim the experts make that the food shortage may be staved off so long as man inhabits the earth.

CAMPAIGN AGAINST TRESPASSERS.

Pennsylvania Adopts Vigorous Methods to Rid Its Right-of-Way of All Types of Intruders.

TRESPASSING on railroad property has caused the death of more than 50,000 people in the United States in the last eleven years. In this same period more than 55,000 trespassers have been injured.

With a view of reducing to a minimum the practise of trespassing on its property, the Pennsylvania Railroad has determined to redouble its efforts to secure on its lines that rigid enforcement of the law against trespassing which in foreign countries has done so much to decrease the number of fatalities resulting from trespassing on railroads.

In 1907 the Pennsylvania Railroad inaugurated a vigorous campaign against trespassing, and, due doubtless to this, the number of trespassers killed in 1908 was only 757. In 1909, 732 lost their lives in this way.

In the eleven years prior to January 1, 1910, exactly 7,972 people who were on the Pennsylvania Railroad's right-of-way in violation of the law, in spite of thousands of warning signs along the railroad, were killed. It is thus seen that in the eleven years an average of two trespassers a day have been killed on Pennsylvania Railroad property.

This long death roll is every year charged up to the railroad even though these people are killed as a result of their violation of the law, under conditions over which the company has no control.

It is not only tramps who are killed and injured while trespassing, though thousands of them lose their lives in this way every year; men of the laboring class, factory workmen, their wives and children, who use railroad tracks as thoroughfares, are killed by the hundreds. That the practise of walking on railroad tracks is prevalent in industrial districts gives added significance to the fatalities on the Pennsylvania Railroad system as a result of trespassing.

The tracks of the Pennsylvania are lined with factories, as they run through the densest industrial section, through territory which holds more than half of the population of the United States. Over 10,000 trespassers were arrested in 1909.

The Pennsylvania Railroad has now posted its tracks and stationed watchmen to see that warnings against trespassing are respected. By redoubling its efforts the company is endeavoring to reduce the number of trespassers who are killed and injured by an even greater number than it has done in the last three years.

The cooperation of city and county authorities has been solicited in this campaign. Heretofore the actual punishment of persons violating the laws forbidding trespassing on a railroad's private property has been infrequent. The cost of imprisonment has deterred the local courts from holding those arrested while trespassing on railroad property.—*Machinery.*

Big rails are harder to lay than light ones, but they carry more, last longer, and are safer. Same way with character.

—Remarks of the Roadmaster.

The Fine Art of Bridge Building.

BY OTTO SCHULTZ.

THERE is no feature of railroad building in which so much depends on careful construction and the maintenance of a large safety factor than bridges and trestles. Tunnels may cave in and landslides block the right-of-way, but compared with the collapse of a high bridge, all these are as nothing.

Fortunately for those who follow the iron trail, American bridge builders are recognized the world over as the most efficient and rapid workers of all the engineering fraternity. Their work may be found not only in North and South America, but in Europe, Asia, and Africa, and are known as models of safe and economical construction.

We present this month the first of two articles giving some of the hard nuts these men have had to crack; situations where nicety of calculation and ingenious methods in overcoming difficulties have played an important part. You will find these two articles full of valuable information.

Some Examples in Bridge Building When American Hustling Won Out Against Foreign Competition. Moving Bridges by Locomotives and Other Feats.

PART I.



SK an engineer how big a bridge he can build and he will counter by inquiring: "How much money can I have to build it with?"

The only limitations recognized by the bridge engineer are financial. At nature's barriers, however formidable they may appear to the unsophisticated, he snaps his fingers.

A commission of army engineers appointed by the Secretary of War, in 1894, to investigate the practicability of bridging the Hudson River, from New York to New Jersey, with a span of 3,100 feet, re-

ported that under certain conditions the practicable limit of a bridge was 4,335 feet. Commenting on this report Gustav Lindenthal, a noted bridge engineer, said:

"I have no hesitation in saying that a bridge with a span of 6000 feet could be built for the heaviest trains running at express speed. Fantastic as it may seem, it is nevertheless true that, based on theoretical resources, a bridge could be built over the Atlantic Ocean which would be perfectly safe, resting on anchored piers which the fiercest hurricane or the impact of the heaviest steamer in collision could not disturb, and with long spans so high

above the water that the tallest vessels could pass beneath."

So long as one can be ferried across comfortably on a big liner, there does not appear to be any pressing need of spanning the Atlantic with a steel highway; but smaller bodies of water in these modern days are bridged at will, provided, always, that the precaution is observed of securing the services of an American engineer.

Supremacy of Our Engineers.

It must be conceded that the first metal bridge ever built was the cast-iron structure with a span of 102 feet erected over the River Severn in England in 1779; and that the Firth of Forth cantilever bridge at Queensboro, Scotland, with its two main spans of 1,710 feet each, is the largest in the world, but with these exceptions all the honors in bridge building belong to the United States.

American engineers have built more bridges, better bridges, and built them under greater difficulties, in quicker time, and at less cost than those of all other nations combined. The railroad bridge carrying the greatest number of tracks is to be found in America. It is the thirty-three track bridge which carries the Erie Railroad over a certain street in Chicago. The only two railroad bridges in the world that are built lengthwise of rivers are to be found in the United States. One of these carries the Santa Fe over the Rio Galisteo in Apache Cañon near Lamí, New Mexico, while the other enables the Denver and Rio Grande to get through a crack in the granite heart of the Rocky Mountains two miles west of Cañon City, Colorado, known as the "Royal Gorge," which is more than half a mile deep and has walls so nearly vertical that from its depths stars can be seen at noon as from the bottom of a well.

Whenever a particularly difficult piece of bridge building has been contemplated anywhere in the world, American engineers have always been called on to do the work. The most spectacular feats of these man spiders in spinning their steel webs in impossible places have always been performed for the railroads.

First Bridges of Wood.

Timber, being abundant and cheap, was the material employed in bridge building.

Some of the wooden structures erected during the first years of the nineteenth century were unparalleled in the history of bridge building. One of these notable structures was the bridge across the Delaware River at Trenton, New Jersey, consisting of five spans, the center one of which was 200 feet long.

It was built in 1803, many years before railroads were thought of, yet when the time came to establish railroad connection between New York and Philadelphia, this sturdy old bridge was found to be strong enough to bear the weight of trains. It was used as a railroad bridge until 1875—a period of nearly thirty years—before it was replaced by an iron structure. This was the only old wooden highway bridge in the world ever converted to railroad use.

Lasting Wooden Structures.

The Portage Viaduct on the Erie Railroad, 234 feet high, designed by Silas Seymour in 1851, built in 1852, and burned down in 1875, has always been considered the boldest attempt ever made in timber trestles. American wooden railroad bridges have given wonderful service. The last of the wooden bridges on the Philadelphia and Reading, consisting of two spans 143 feet and 158 feet at Port Clinton, built in 1874, stood up under the steadily growing traffic until it was replaced with a steel structure in July, 1905, a period of thirty-one years.

Recognition of American supremacy in bridge building has not been limited to Americans. M. M. Malezieux, *Ingenieur L'Ecole des Ponts et Chaussées*, who in 1870 was sent by the Minister of Public Works of France to study methods of construction in England and the United States, said in his official report:

In bridges we saw nothing original; nothing to be compared with the instructive novelties of America.

When Henry Meiggs, the spectacular American who went to South America to build railroads some thirty years ago, had amassed railroad contracts aggregating \$134,000,000, he was about the easiest mark for solicitors that ever appeared. No man who applied to Meiggs for a contract went away empty handed—that is, for a while.

Later in the proceedings, no contractor who could not prove that he was a free-born American citizen and who did not have the

grip and password could get a red cent out of Señor Enrique. How this great change was wrought was clearly set forth in a letter written by Meiggs in reply to inquiries from a Mr. Slater, a contractor on a government railway in Chile, who sought information. The letter, dated Lima, January 2, 1874, read in part as follows:

I am in receipt of your favor of Nov. 28, concerning French bridges. I must say, for these countries, at any rate, they are a complete failure. They may, perhaps, stand well enough when once erected, but when I tell you that the French contractors were engaged on the Oroya Railroad three months and twenty-four days putting up a single-span, lattice-girder bridge a little over fifty yards long, against three months and fifteen days occupied by our men on the Varrugas Viaduct, 575 feet long, with three piers, one of which was 252 feet high, you can form an idea of the fearful cost of transportation caused by such delays, amounting on this road to more than the value of the bridge.

I have been still more unfortunate in my experiments with English bridges, two of which failed miserably on the Pascamayo Railway. So after all these trials I have returned entirely to the American market for all bridges.

Meiggs might have added a wealth of interesting details, but he didn't. For instance, he might have told that the order to the foreign contractor was for three single-track bridges of 170 feet span. When the first one was erected it collapsed under the weight of three cars, which was only one-twentieth of the load it should have carried.

A Few Comparisons.

It was lost in deep water, with the cars and three men who happened to be on them. The foreigner rebuilt the bridge on the original abutments. This time the bridge fell down under the weight of five cars before there was a chance to remove the false work.

An American then put up a bridge that would stay up. The last foreign bridge to collapse weighed 127 tons, cost \$33,497, and required eight weeks to erect. The American bridge that replaced it weighed only sixty-one tons, cost \$19,569, and was put up in eight days. The third foreign bridge is still lying at Pascamayo just where it was unloaded from the ship unless some enterprising Peruvian youngster has sold it for junk.

The Varrugas Viaduct to which Meiggs

referred was a job which attracted world-wide attention. It was fifty-one miles from Callao and 5,836 feet above sea level. Being 575 feet long and 252 feet high, it required a lot of iron, all of which had to be shipped to the spot on the backs of mules.

The building of the trail for the mules along the fearful slopes and gorges of the Andes cost more than the grading of some American railroads. Even at that the trail was so perilous that ten or twelve mules tumbled off it into the depths below every day.

Sometimes the iron could be recovered, but the mules weren't much use. However, a few hundred mules, more or less, were nothing to a man who could afford to spend two hundred thousand dollars in gold to celebrate the completion of a railroad and charter steamships and build roads to gather his guests. He kept a herd of 1,500 mules at it until the material was assembled.

Examples of American Hustling.

Then L. L. Buck, an American who has since made a great name for himself, took charge. He strung eight wire cables across the chasm, from which he suspended tackle by which the tall towers for the bridge were erected. After the towers were up, Buck, with a construction gang consisting chiefly of common sailors picked up in Callao, finished the job in ten days, and did it so well that a party of insurgents during one of the frequent Peruvian revolutions tried in vain to tear it down.

It was a barren triumph, however, for *London Engineering*, in a ponderous editorial, proved that he couldn't have built such a bridge in so short a time, and as if that were not enough, a flood came down the ravine, carrying with it boulders weighing fifty tons, and swept the bridge to the bottom. It was replaced in 1890 by a cantilever structure designed by Buck.

As another example of American hustling, the Louisiana bridge across the Mississippi will serve very well. This bridge which had a draw span of 444 feet, a work of great magnitude, was completed in less than seven months.

A span of the Cairo bridge across the Ohio, 518 feet long, was erected in six days; two spans were erected, the false work and traveler being erected for each span and taken down and put up again

for each span, in one month and three days, no work being done on five days of this time. Compare this with the construction of the Godavari bridge at Rajahmundry on the East Coast Railway in India.

The bridge, 9,096 feet long, in fifty-six spans of 150 feet, was begun November 11, 1897, and was not opened for traffic until August 6, 1900. It actually took those Englishmen, by their own account, an average of twenty-one hours to lift one pair of girders and seat them. In building the Krisna bridge, on a branch of the Great India Peninsula Railway, between Bombay and Madras, the builders doddered over each span for six weeks.

Contractors Were Too Slow.

With this glimpse of British methods, it is easy to perceive why the Egyptian Government turned to America when, in 1899, it needed a bridge in a hurry to get Kitchener across the Atbara River to chase the Mahdi out of the Sudan. The army officers first asked British bridge manufacturing firms how quick they could turn out a rush job. Time just then was of more consequence than money. The best the Britishers could do was seven months for a modest little bridge of seven spans of 147 feet each, weighing altogether only 800 tons.

Fearing that in seven months the Mahdi might get tired of waiting to be whipped and do something really unpleasant to Kitchener, the London agents of the Egyptian Government, on January 7, 1899, cabled to the Pencoyd Steel Works asking if the American firm could do the job. The answer was in the affirmative.

On January 24 the specifications for the bridge were received. On January 27 the Pencoyd people cabled their bid, which was accepted as quickly as the message could be flashed under the ocean, and March 7 saw the steel for the entire bridge shipped to Alexandria.

Beyond Their Comprehension.

The Pencoyd Company undertook to turn out the steel and get it on shipboard in forty-two days. This was actually accomplished in forty days.

Thirty-two days more sufficed to erect the bridge, though it could have been done in six days less but for a storm that stopped

all work. Yet, as the Atbara was a torrential stream, the bridge had to be erected without false work.

Maybe there wasn't a row in England about it. The army officers who were responsible for sending the order to America were abused until the English press ran out of ink and epithets. Then they said it wasn't so, anyway. A Mr. Rigby, of the firm of Rigby & Westwood, one of the British bidders, said in an interview:

"I simply do not believe that any firm in the world can turn out a bridge of that size in the time mentioned. We and other British firms made special efforts to secure this particular contract. At a meeting of our directors who are all connected with large steel works it was agreed to divide the supply of the required material and let other orders wait.

"We made a very low tender, guaranteeing delivery by April 30, but no tenders of British firms were even acknowledged. Of course the bridge has undoubtedly been shipped from Philadelphia, but I absolutely decline to believe that work commenced February 8. The American firm either had the specifications beforehand or adopted a standard bridge to suit the requirements of the case. No other explanation is possible."

An American Bridge in Burma.

Another case in which some Britishers wanted a bridge they couldn't get at home was that of the Gokteik Viaduct in Burma on the line from Mandalay. This structure, one of the famous viaducts of the world, 400 miles inland from Rangoon, and 4,000 feet above sea level, is 2,260 feet long, 320 feet high and contains 9,703,831 pounds of steel.

This quantity of material, together with that for the great traveler weighing 180,000 pounds with which it was erected, had to be shipped from Rangoon over a narrow-gage road with four per cent grades on which eighty tons made a train-load.

Seventy American bridge builders went out with the material. They began construction in January, 1900, and with the aid of five hundred natives, who thought their pay of seventeen dollars a month exceptionally good, finished the job in October of the same year. The fourteen towers were erected with the traveler, which had an overhang of one hundred and sixty-

five feet. Again there was such a row in England over the impudence of the Americans that Lord George Hamilton, Secretary of State for India, wrote as follows to the *London Times*:

In the case of the Gokteik Viaduct, the Burma Railway Company had no option but to place the order for its construction with the Pennsylvania Steel Company. There were no British firms who had anything like the same experience in this class of construction. The tender of the Pennsylvania Steel Company was much less in price and quicker in time than any of its competitors.

Because one has the good fortune to be an American it does not necessarily follow that one is therefore a born bridge builder. The New York canal commissioners found this out when the first enlargement of the Erie Canal was undertaken in 1836. Knowing that some hundreds of bridges would be required and wishing to have a uniform design, the commissioners asked the chief engineers to submit plans.

When all the plans had been sent in the commissioners thought they could make something a great deal better. So they took a feature out of this plan and a dab out of that and more or less out of the others and fixed up a crazy-quilt design that was altogether lovely in their eyes. They presented it to the engineers as a masterpiece of genius and ordered it adopted as the general plan for all the bridges on a canal three hundred and fifty miles long.

John B. Jervis told the commissioners such a bridge could not stand up, but they attributed this remark to professional jealousy and went ahead. The first bridge, built at Utica, tumbled down as soon as it was completed and killed two men. The second, at Syracuse, also toppled over the moment the false work was removed.

The President of the Mexican National

(To be concluded.)

Railway, in 1883, conceived the clever idea of saving some money by manipulating Belgian iron with American brains. So, after securing some American plans for bridges, he trotted over to Belgium and placed contracts for the material much cheaper than he could have done in the United States.

But when the bridges were shipped, the iron turned out to be so wretchedly inferior that some of the eye-bars actually broke before ever reaching Mexico. Then the engineers tested a number. They all broke at 24,690 pounds per square inch or less, while the lowest for American iron was 58,000 pounds. The whole lot of bridges was condemned, and the road, on which large sums had been expended, was bankrupted.

Some of the cleverest feats of the bridge magicians have been performed in the work of rebuilding. Railroad bridges have to be rebuilt almost as soon as they are completed, not because they are not made properly, but because the operating department keeps increasing the size of cars and locomotives so rapidly that a bridge which in the spring is deemed amply strong to support the traffic for several generations is discovered in the succeeding autumn to be altogether inadequate for the growing loads it is called upon to bear.

No railroad management was ever known to discover that a bridge needed rebuilding until it was wanted immediately. This means that some pretty lively hustling has to be done by the bridge department and, of course, traffic must not be interrupted.

The engineer who laid out a passenger-train for a minute or two, no matter what kind of a bridge he was rebuilding, could confidently count on having something pretty harsh said to him as soon as the president could get to the wire. This condition leads to some phenomenal records in handling ponderous masses of steel.

TO TELL STEEL FROM IRON.

IT is often so difficult for users of pipe to distinguish iron pipe from steel that a few hints on the subject may be found helpful. The scale on steel pipe is very light and has the appearance of small blisters or bubbles; the surface underneath being smooth and rather white; on iron pipe the scale is heavy and rough. Steel pipe seldom breaks when flattened, but when it does break the grain is very fine; whereas the fiber of iron is

long, and when the pipe breaks, as it readily does in the flattening test, the fracture is rough. Steel pipe is soft and tough, says *Domestic Engineering*, and when it is threaded, the threads do not break, but tear off. It requires very sharp dies to cut the thread on steel pipe successfully, and a blunt die, which might be used with satisfactory results on iron pipe, will tear the threads on steel pipe, because of softness of the metal.

GETTING EASY MONEY.

BY EMMET F. HARTE.

**Honk and Horace, for a Brief Moment,
Enjoy a Rich Reward for Baffling a Brigand.**

SOMEBODY came along one day and tacked up a dodger on the waiting-room wall. Neither time, expense nor skill had been squandered on that dodger. It had been struck off, how-come-you-so, on rotten paper, with cheap ink, but it set forth, specifically, three facts of importance:

First, that a depot, presumably containing ticket, telegraph, baggage, express and accident insurance privileges, located in the town of Pleasant Lake, Montana, had been looted to the tune of—they never tell you the exact amount—

Second, that the brigandage, robbery, thieving, outlawry or dastardly deed in question had been performed, accomplished, perpetrated and pulled off by a lone bandit, described to wit: Height, about 5 feet 8 inches; age, about thirty-five; build, stocky; hair and eyes, dark brown; scar over right eye; wore black slouch hat and black rain-coat, and—

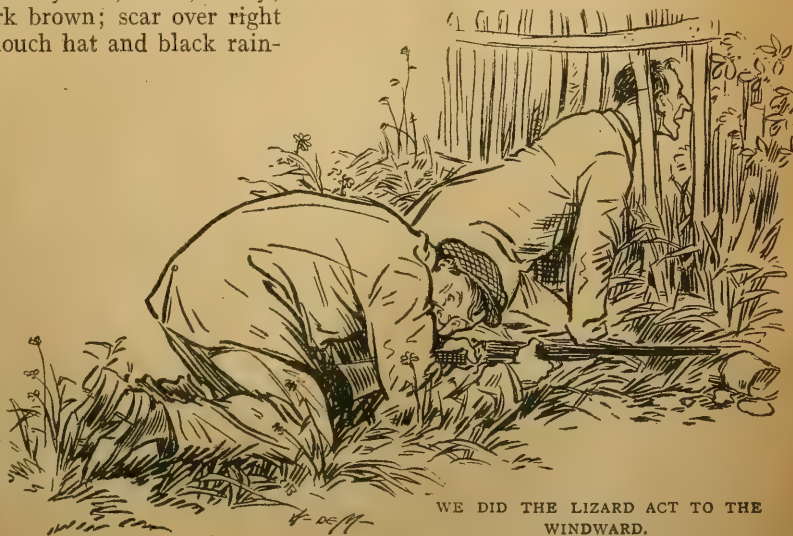
Third, that a reward of five thousand dollars would be paid for the before-described young gentleman, duly apprehended and delivered, or upon satisfactory proof of his demise during the process of such apprehension and delivery.

Honk and I read it over and palavered about it

considerably while we were resting every now and then. We couldn't either of us recall an instance where anybody had ever caught or killed a brigand and collected a wad of easy money like that, but it appealed to us, nevertheless.

I shouldn't wonder if it wasn't because we were a couple of devil-may-care fellows, who relished personal danger and hazard for the sake of the pure excitement of it. In fact, we would both go out of our way to—how's that? I didn't say, to avoid danger. Oh, very well, never mind.

"It would be too much to expect that the rummy would ever light around this neck of the woods," remarked Honk to me. "In the first place, he'd have no occasion to come to Valhalla, it being no suitable haven for crooks and, moreover, anybody with the sense that is set apart for little geese would



WE DID THE LIZARD ACT TO THE
WINDWARD.

know better than to try to sneak past us. We'd nail 'em on the spot. My clairvoyant sense would detect 'em at once."

"Right!" I agreed. "We'd detect 'em as far as we could see 'em—maybe. But, say! What would we do with—well, five thousand dollars, now, for instance, if we had it? All paid down in crackly yellow and brown fifties and hundred-case notes? I believe I'd lay off another month—"

"Why need you? Your job is an endless vacation, as it is. I know what I'd do with my share. I'd buy that new Ruhmkorff coil and the big concert grand phonograph we've been wanting, and then I'd sit back in a new leather rocker, with a fan and a panatela and a colored boy to bring me cracked ice for my lemonade—and under the table, I'd have a bucket, with four, gold-labeled, dusty—"

"And we'd send off for caviar and reed birds and a barrel of oysters, bearded like the prophets of old, and we'd have pheasants and rice and chop suey cooked by an imported chop su-maker," I murmured, with rapturous and shining eyes.

"Hush!" he said. "In another minute you won't leave me nothing to tell."

Although the matter did not come up for discussion again for several days, we could not entirely dismiss the idea of that five thousand. In the meantime, I noticed Honk scrutinizing every newcomer very narrowly, and whenever I saw anybody who looked anywhere near five feet eight and age about thirty-five, my left palm would begin to itch, which is an almost infallible sign that I'm going to get money.

Not even my most intimate acquaintances were entirely exempt from suspicion during this period. So far as that's concerned, though, it is sometimes a stroke of good business policy to be suspicious of your best friends. For instance, there's that "I'll-hand-this-to-you-Saturday" gag. And the guy that wants you to make a talk for him up at the shoe store so he can work his face for a six-dollar pair of kicks, the day before he leaves town forever.

But there I go, holding another autopsy while the gang is waiting for the score.

So far as I was implicated in this man-hunt, the prize money began to look dim and miragic to me as soon as I'd had time to cast up a brief census of everybody in and near Valhalla. I couldn't even fasten the thing on Butch Poteet's father-in-law.

While I harbored all sorts of villainous

opinions and ugly intents toward my fellow citizens, I would have been compelled to admit, under cross-examination, that I couldn't lay my hand on the Pleasant Lake bandit if I'd had to, and that five thous' was some incentive, too. If there's anything I wouldn't make a stab at for five thous', what it is has clear slipped my mind.

As is usual, however, just when I decided that there was nothing doing, Honk struck what he classified as a clue. He broached the subject to me one evening while we sat on the observation platform of the Medicine House, listening to the cicadas cicada-ing in a near-by sycamore tree.

"I see there's a fellow stopping at Henry Hinton's who never came in on the motor-car," he remarked.

The aforesaid Henry Hinton was one of the "poor white trash" truck-farmers, out by the reservoir. He owned a five-acre tract—that is, he'd paid a hundred dollars on it and was behind with the rest of his payments.

"This person answers to the name of Teegarten—Ezekiel or Zeke Teegarten. He's about five feet eight, and might be thirty-four or thirty-six years old, according to the light. He looked thirty-two to me, but it was cloudy this morning when I saw him. He claims to be a cousin of Hinton's."

"How did he get here, if he didn't come on the train?" I asked. "Did he come on horseback, in an auto, or blow in on a biplane?"

"Neither one of the six," Honk vouchsafed. "He hoofed it in. I made a few judicious inquiries, this morning. He is supposed to 've come from Kankakee, Illinois, on foot, for his health. He is Westoning his way westward for the benefit of his lungs, or indigestion, or neuralgia, or something, presumably."

"He appears just about stiff and sore enough to me, from a distance, to have just about piled off from the rods of some night freight-train at Millardsville and walked on over here during the wee small hours."

"Well," I said, scratching my left palm. "We'd better slip over and get him this evening hadn't we? It would be very disheartening to make the arrest to-morrow or next day and find him gone. An arrest, without an arrestee," I declared, sagely, "is as unsatisfying as a clam-bake without clams."

"Yes, but it might not be our man?"

"I'm convinced it's him," I said. "From your description, it must be him. My sakes!—besides, we need this reward money mighty bad. Let us arm ourselves, go out quietly and you can secure him while I keep watch at the gate to see that he don't elude

We approached warily. In fact, as old Uncle Tobe, in the town where I was raised, used to say when describing one of the battles he participated in "endurin' ob de war," we "snuck up froo dem dar weeds des' lack Ku-Kluxers." It wasn't late.



"SPEAK UP, YOU OLD BUCCA-NEER! WHERE'S THE DOUGH?"

you. Then we'll put him through the third degree, make him cough up the hiding-place of his loot, and wire for the officers to bring on their prize money. It will be as easy as catching chiggers in a weed-patch."

It required some urging to get Honk sufficiently warmed to it. I was even forced to play my big trump, *i. e.*, that he was afraid to go out and help arrest this Ezekiel Teegarten person, before I got him started. I was crazy about that five thousand, myself, I tell you.

We armed ourselves. I took the target rifle and Honk his trusty old navy revolver. Then we stole sleuthfully into the night.

Henry Hinton lived in a manor house, that, in the gloaming, oh, my darling, might easily be taken for a common shack. A numerous, noisy colony of dogs of various sizes and ancestry made the premises a stamping-ground.

Henry and his supposed cousin sat smoking their pipes on the lawn—or the place where the lawn should have been.

We held a whispered consultation. Honk's feet began to chill just a trifle.

"I tell you we might be too precipitate in this," he insisted. "You can't jump in and pinch anybody, haphazard and hit-or-miss, without no warrant or anything but an empty suspicion. What if the guy wasn't guilty? He might get pretty sore about it, don't you think?"

"Oh, he'll be sore anyway, as far as that goes," I whispered, airily. "If he can prove that he's innocent, why, we'll let him go. That's all there is to it. What more can he ask, than that? What I'm trying to beat into your batter-cake of a brain is this: that he's liable to be the man we want and we can't afford to take chances on him getting away. Better that ninety-nine inno-

cent should suffer than one guilty escape," I quoted. "Think of that five—"

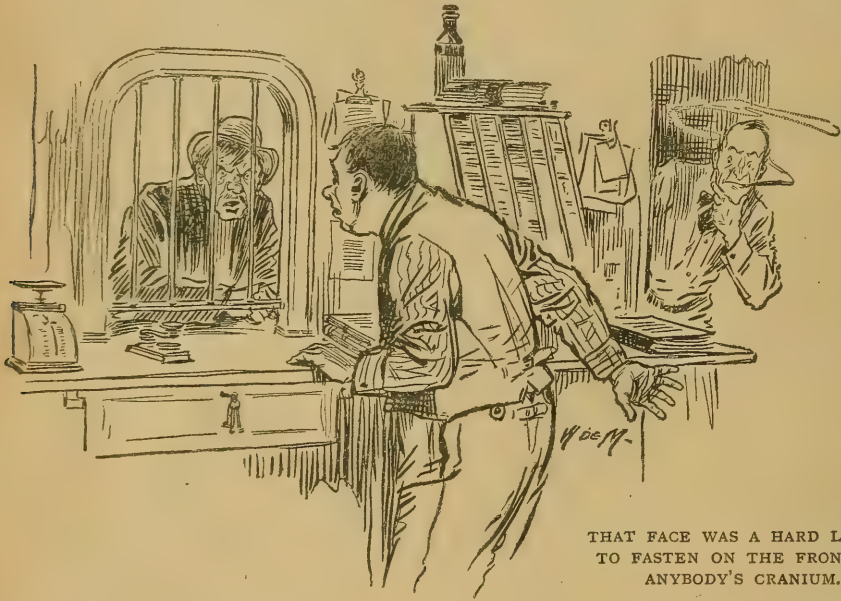
"All right, all right," he said, grumpily. "Had we better rush in by main strength and clumsiness, or use a little suavity and stratagem? What do you think—or do you ever? Maybe you'd better saunter up and ask to borrow a bicycle pump or something and grab his hands. Then I can come and help tie him with a rope—by George! we forgot to bring a rope!"

"How would it do to crawl quietly along the fence to where we can hear what they

"Tain't no more dangerous than soldierin', Hen. An' look at the diff-runce in the pay. If I wuz you, I'd quit this farmin' as quick as I could pack my grip. Of course, it ain't like clerkin' in a store, but you can make more money in one month than you ever could here in your whole life."

"Aw, it's too much scramblin' around in the dark, Zeke. I never would git used to that."

"Yes, you would. You'd git so's you could see like a cat . . . an' then, you don't



THAT FACE WAS A HARD LOOKER
TO FASTEN ON THE FRONT OF
ANYBODY'S CRANIUM.

are talking about, if you're so picayunish about the fellow's innocence?" I suggested. "Mayhap the caitiff will convict himself by his own word of mouth."

Honk was perfectly agreeable to this, so we did the lizard act to the windward. That was a move in the right direction, for the immediate vicinity of the shack was alive with dogs and if they had caught our scent we would have been the focal point of an uproar that could have been heard for miles.

The same balmy breeze that carried away the odoriferous evidence of our presence, also brought us snatches of conversation we could use in our business. Something like this:

"Yes, but Zeke. You take it all around, and it's durned dangerous work. You never know what minute—"

have to work in any one part of the country all the time. You can go East or West or North or anywhere you want to . . . the biggest killin' I ever made wuz in—"

"Maybe there's other rewards out for this guy," I whispered to Honk, significantly.

"We'll find out," he replied. "He's a bad egg and no mistake. Let's worm back to the road and come up on 'em from the front."

This we did. We stopped at the fence and halloed. A riotous chorus of howls, yelps and ki-yis greeted the hail. When a lull came, punctuated at intervals by the yap of some cur that had just arrived from a distance, we climbed the fence and made ourselves known to Hinton.

"Seen anything of a spotted setter pup, hereabouts?" asked Honk, improvising an

excuse. "We're looking for one. You seem to have a pretty fair assortment here, from the noise they make."

"It's the fellers that run the depot," we heard Hinton tell his companion.

"No, I don't know's I've saw your dawg," he replied, "but you c'n take a look amongst the bunch if you want to."

Hinton had no family whose peace might be disturbed, so we felt no qualms at kicking a dog or using unparliamentary language to deter the boldest from securing souvenirs out of our legs.

After making a desultory search, we decided that the lost pup was not among those present and paused to chat a minute.

"This here's my cousin, from Illinoy; name's Teegarten," Hinton said.

"Teegarten," said Honk. "Any kin to the Teegartens in Streator, Illinois?"

"Got an uncle there," said our man, grouchily.

"What's his first name?"

"John."

"Listen to that, Horace," said Honk. "A nephew of old John Teegarten, at Streator, away out here! You boys have got to go down and have a drink on that—we've got a brand new jug—just came today. 'Who'd 've thought we'd find a man from the old home country up here? Get your hats, both of you—you've got to come.'"

The prospect of a free drink or two is a potent dispeller of erstwhile dulness and indifference in citizens of the Hen Hinton and Zeke Teegarten persuasion. They came like little piggies to the lure of the slop-trough.

"Sure thing," said Hinton. "Never was more willin' in my life, was you, Zeke?"

"Never a time," said our prospective bank-roll.

Thus does acumen and sagacity triumph over the coarser and less discreet methods of the knock-down-and-drag-out school of criminal catchers. It is the supremacy of the trained detective over the village night-watch; the preponderance of brain against brawn; the vindication of mentality as opposed to the old-fashioned, water-elm club.

We led the way in high glee, escorting the not particularly valuable looking Zeke, but worth five thousand to us, by the shortest cuts, to the Medicine House. On arrival at that temple of progress and seat of learning, I dallied with friend Hinton on the outer battlements for a minute while Honk playfully shoved Ezekiel ahead of him, through

the gangway, and introduced the muzzle of his forty-four caliber persuader under the gentleman's right ear.

It was done quietly, scientifically and with despatch. I kept up a running fire of voluble discourse, springing wastefully many of my famous epigrams and brilliant quips, at the same time keeping an ear cocked for war news from within.

All I heard was a muffled command or two, some clatter and the tinkle of an oil can or something falling off the table, and then Honk called affably:

"Well, what are you fellows waiting for? Aren't you going to get in on this?"

"Coming," I said, and in we bustled, Hinton first. Honk had his prisoner trussed up in a chair, as neatly as if he had been tied on a wager, while he was leaning against the table where our electric reading-lamp glowed brightly, with his redoubtable revolver poised in readiness and a good-humored grin overspreading his cheery countenance.

"Stick up those unwashed paws of yours a minute, Henry," he directed. "Horace, tap his pockets lightly for a chance weapon, will you? No gun or knife on him? Good! Sit down, Henry, and behave yourself."

The surprised and speechless truck-farmer did as Honk directed. Our other captive stared in a dumb amazement no less pronounced.

"Now," said Honk, easily. "Mr. Teegarten, so-called, your harvest days are over. That last Pleasant Lake, Montana, deal was the blow that killed father. What we intend to ascertain, just at this juncture, is whereabouts did you put that satchel full of spoil. Speak up, you old buccaneer! Where's the dough?"

"What's this crazy mark, here, talkin' about?" the five-foot-eight man asked me huskily. In the stress of the moment, he looked almost forty years of age to me.

"Oh, we're on, kiddo," I said. "No use quibbling. It won't go, with us. We know you stuck up the Pleasant Lake depot, and we've got you faded. It's all off."

"Me? Stuck up the what depot? Say, what's the joke, fellers?"

"That's what it is," Hinton chipped in, relieved. "They're tryin' to play a joke on us, Zeke."

"Horace," said Honk. "You slip over the way and get that dodger. We'll compare this brigand with his description. I'm satis-

fied he's the crook we're after, but we'll have to convince him, it seems."

When I returned, Honk catechized the prisoner. "How tall are you?" he began.

"What the—" A little revolver play and—"Five feet 'n eight inches, I reckon," sullenly.

"How old are you?"

"Thutty-five."

"What color hair?"

"Say, what'n thunder you—"

"Stocky build," Honk read aloud. "Yes, he might be called stocky built. But, say—wait a minute! Horace!" Honk seemed to be losing some of his assurance. "What about this scar business over the right eye? He's short a scar over his right eye. What'll we do about that?"

"I can hack one in a second," I said. "Where's my little ax?"

Honk wavered and then began to backfire.

"I guess it's a horse on us," he said. "Cut him loose, while I get out the jug and tin cup, Horace. Teegarten, old-timer, this is a simple case of mistaken identity. Deeply as I regret it, you're not the man we want. Pour yourself a snifter."

"Lemme see that paper," our ex-captive requested. It undoubtedly interested him.

"Five thousand dollars reward!" he ejaculated. "How many years in the pen do you s'pose they'd give the feller, if they was to catch him, now?"

"That would depend on the judge," said Honk. "Maybe two years, maybe ten, maybe twenty-five. Why?"

"I was just a-thinkin'," returned Teegarten. "I wouldn't mind to serve two or three years fer half of that there reward. Of course, I ain't the man, but that wouldn't matter. I could make out that I was. But, excuse me, they might give me twenty-five."

"You ought to have twenty-five," Honk declared. "Any man that proposes to serve a term in prison for half the reward is a swindler. It's mighty lucky for you you haven't got that scar over your eye—aw, scat! Get out! I don't like your looks."

"Just a minute," I interposed. "I've got a curiosity to know what it was you fellows were talking about when we came up over there awhile ago. Some kind of a dangerous occupation, I believe."

"Coal minin'," said Hinton, promptly. "Zeke, here, wanted me to quit truck-farm-in' and go to minin'."

With that, we closed the interview. Our

guests left, taking with them four generous drinks from our best jug, for which we had received absolutely nothing in return—not even entertainment.

"So much for that," said Honk. "Charge up four drinks to the P. & L. account."

"Anyhow, it was a neat capture," I said, ingratiatingly. "Slick as a greased-eel. You're there with the claw-hammer and alligator-wrench clutch if we only find the right man."

He grunted something and went to bed.

And what do you think?

The right man came, all right. Looking at it from the viewpoint of a booky, there was about one chance out of a million for the man to actually come to Valhalla, but that one chance turned out to be a safe bet.

Two or three days after the Teegarten incident, Honk and I were inside our little grating, pretending to be busy. It was an hour or so before the motor-car was due to leave for Millardsville. Somebody came into the waiting-room and approached the ticket-wicket. After the proper amount of time had elapsed to preserve professional dignity, I looked up. One mustn't be too prompt, it looks like they were scared of their job.

A dark and gloomy face was peering at me. No, no, I'm rattled! I don't mean that the face was peering at me. I mean that the man was peering at me, with his f—no, not that, either. Anyhow, I took a second look to make sure I wasn't covered with a revolver. Gee, but that face was a hard looker to fasten on the front of anybody's cranium! Then I noticed the scar above the right eye. Five feet eight, and age about—

"Wot time does this yer car leave for north?" rumbled a hoarse voice, ominously.

"Honk," I said. "Information!" Then I added a warning "S-st!" which, in our order, same as geese, snakes and other flora and fauna, means "wake up, look out and beware! There's something doing!"

Honk hopped up, with alacrity.

"Train for Millardsville leaves at nine-thirty," he said. "Where to, please?"

"I want to send this yer grip to Kansas City. Kin I send it by express?"

"Sure thing. What's in it?"

"Wot you want to know that for?" suspiciously.

"Have to know, to tell the rate." Honk toyed with a paper-cutter while the fellow deliberated.

"Ore samples," the man said finally. Honk dashed off the way-bills, entered a nominal valuation and scratched his head, but did not collect the fee.

"I'll have to verify that rate by wire," he told the man. "You come in in half an hour and pay the charges and she'll go on the next train."

Our friend with the scar shuffled out. He

silver money included to make a pretty hefty package.

"Aha!" said Honk. I "Aha-ed" a few times myself. Honk continued briskly:

"When this lad comes back we'll have him come around behind, to sign the book, or for some pretext or other, and then we'll nab him. Take no chances. He looks husky. If necessary crack him over the



I BELTED MR. CUSSER A GOOD ONE
ATHWART THE MEDULLA
OBLONGATA.

didn't have on a black slouch hat, neither did he have a rain-coat, but my left palm was doing some tall itching, just the same.

"Quick!" said Honk. "Let's see what's in this. Gimme a piece of wire. I'll pick this lock before you can say what's trumps—"

There were a few clicks and squeaks and some seconds of suspense and then—the grip was open.

Yes, it had ore samples in it all right—not! It had express money orders and packages of currency and rolls of gold coin in original sealed wrappers, with enough loose

bobbin with a stool or the stove poker or anything handy."

We hadn't long to wait. Our man returned promptly at the time agreed. Honk invited him to come inside our scantum scantorum, and he came. It's a wonder he didn't come with a gun in each hand and stick us up in regulation style, but I guess it wasn't his working day. Honk supplied a pen and showed him where to sign. At that moment we pounced.

Did you ever fall down a flight of steps in company with a cook-stove filled with fire, a bee-hive in working order, a bunch

or two of bananas, and a spool of barbed wire with the end loose? If you did, you can sympathize with Honk and me. We undoubtedly started something when we pounced.

That fellow was a bucking buzz-saw. If I had ever got in reach of him, he'd have suffered severe punishment, but he invariably hit or kicked me or both before I could close in and use my terrible infield punch.

Honk got fastened to the guy somehow, and when he could have let loose, wouldn't. Later, when he would have, most gladly, he couldn't. And the fellow cursed without pause, real hateful, throughout the fight. That was what aroused my ire.

To be kicked in the stomach and given a knuckle-wrist-elbow swipe simultaneously is annoying. But when your assailant—or, let's see, was he the assailant?—well, when the kicker and swiper before mentioned, calls you a whang-blam-boom-zip, blankety-blank little sausage along with it, one's soul rebels.

So I rose up from my corner clasping a section of inch galvanized-iron pipe, some seven feet long, and danced across and belted Mr. Cusser a good one athwart the medulla oblongata.

Honk wrenched his throat out of the clutch of the fellow's twitching fingers, and we laid the geezer out on the floor with his hands and feet tied and the ropes spiked fast. When he woke up from his nap, we kept away from him, too.

But that belt I gave him with the gas-pipe stopped his saw-mill. He was very quiet and well-behaved, and made no more comments of a personal nature.

We had wrecked the office and, as a conflict always attracts the idle and the curious, soon the depot windows were clogged with sightseers. It became noised about that we had captured a desperado and Valhalla rang with the stirring tale of our bravery and reckless daring.

Once or twice I noticed the haunting eyes of Zeke Teegarten, green with a dash of yellow in them, watching us from the outskirts of the crowd. He looked envious. I

suppose he felt that he'd been cheated out of twenty-five hundred dollars by the rottenest kind of a fluke.

As soon as we could get 'em word, a whole flock of officers came to get our brigand. Yes, he was the right man and he'd been caught with the goods. It was a great catch, they all said so, and our five thousand was paid over promptly, without a whimper. We heard that the fellow got fifty years, as the direct result of his visit to Valhalla.

Five thousand dollars, in one gloojous, joyful wad! Think of it! We spread it out on the table in the Medicine House, while the phonograph played: "Since I've Got Money in the Bank," and "Shine, Little Glow Worm, Shine!"

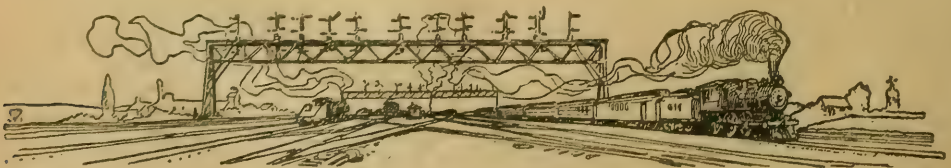
Valhalla came down to rubber at it through the windows and to admire and point the finger of pride at Honk and me. Toward evening of that delirious day, I had one lucid moment.

"Say," I said. "Let's get this bunch of dough up to the bank, before it closes."

"Tut, tut!" said Honk. "What's the use of hiding it in a gloomy bank? We'll keep it here in the car, where we can see, hear and handle it; it has such a cheerful crackle to it. Besides, nobody could steal it while we're here. Huh-nuh! I guess not!"

The rest, alas, can be told in a few words. Ah's me! Heigh ho! It was nearly noon when we awoke, the following day. Our heads felt as big as the pumpkins they really were. The sweet, oily odor of chloroform hung in the air of the tightly shut car. And our five thous'? Yes, it was gone. And the thieves left no clue—except a few hoof-marks, a bandanna handkerchief we'd seen in the possession of Zeke Teegarten, and Hen Hinton's pipe lying beside the empty jug on our table.

We traced them to the Mexico line, or more explicitly, El Paso. At that point we learned of a certain game of chance or hazard in which one Velvet-Fingered Martin had participated. Under the circumstances, the least we could do was to abandon the chase.



Helping 'Em Over the Hill.


BY CHARLES FREDERIC.

HEAVY grades are the bane of railroad men. Besides furnishing many brain-racking problems for civil engineers and construction bosses, the tallow-pot always has to work harder, the eagle-eye has more to worry about, and a thousand and one things are apt to happen to keep a train-crew in hot water that could never occur on a level track.

But before the Mallet compounds and the small-wheeled, mountain-climbing hogs came into use, things were a good deal worse than they are now, and hundreds of inventors put in all their spare time trying to find a way to keep the peanut-roasters of those days from getting stalled on the steep curves and burning holes in their tires.

Instead of planning heavier and more powerful engines, however, many of these early locomotive designers seemed to have been convinced that if they could only get a hard enough grip on the rails, the weakest sort of an engine could pull a full-sized train up anything that was not an absolute precipice.

Freak Devices and Strange Schemes of Early-Day Inventors, Concocted To Make Hill-Climbing Easy, Found Their Way, One by One, to the Scrap-Heap.

 **I**F you wanted to build a railroad and there was a mountain right in your way, what would you do about it?

Out West that might not be regarded as very much of a conundrum. There, when a mountain doesn't get out of the way, so much the worse for the mountain; for the railroad builders run right over it without compunction or remorse. Nevertheless, this same problem has caused many men lots of sleepless nights, not to mention patent-office fees, expenses for stationery and models, and time without limit.

For twenty years after Trevithick's first engine was built everybody was certain that the locomotive would never be able to move even its own weight on level ground. To help the poor thing out, Blenkinsopp provided it with cog-wheels in 1811, while Bruntou improved upon this by substituting

legs in imitation of those of a horse in 1813.

After it had demonstrated its ability to haul a goodly load in addition to its own weight, the knowing ones compromised on a certainty that the locomotive could never run up-hill. Afterward this was amended so as to limit the climbing capacity of the locomotive to a grade of forty feet to the mile.

But if railroads had been limited to a grade of forty feet to the mile, their field of usefulness would have been so narrow that they would have been practically valueless. Perceiving this, a host of inventors has sought in every way but the right one to help the locomotive out. Their efforts form a most singular chapter in the history of the railroad.

The earliest and most persistent device, upon which many a fantastic variation has been embroidered, is the center rail. Not

a rack rail, but just a plain rail by which the locomotive was to pull itself up by adhesion instead of by cog-wheels.

The first inventors to appear on the scene with a center-rail locomotive were Vignoles and Ericsson, whose British patent, No. 5,995, was dated September 7, 1830. Charles Vignoles was one of the earliest railroad engineers who laid tracks in Austria, Prussia, and Russia, and, besides, being a pioneer railroad builder in South America.

He was the inventor of the T-rail, which was long known as the "Vignoles rail." He was president of the Institute of Civil Engineers, the foremost engineering society in Great Britain, in 1870, a fact which indicates his professional standing.

The Vignoles and Ericsson engine was to have two horizontal driving-wheels, in addition to the usual vertical ones, to be used only in hill climbing. One horizontal wheel was larger than the other, and was worked by bevel-gear from the axle of the ordinary driving-wheel, which could be thrown into gear on reaching the hill and out again after getting to the top. The smaller horizontal wheel was to be pressed against a smooth center rail by a lever controlled by the engineer.

A Locomotive with a Grip.

Henry Pinkus improved upon the original device with a contraption for which he obtained British patent No. 8,663, dated October 15, 1840. Both horizontal wheels in the Pinkus attachment were of equal size. Both were carried on the ends of bent levers crossed like a pair of shears, the pivot being in the vertical plane of the center rail.

The long ends of the levers were connected by a screw with right and left hand threads, which was tightened by a ratchet-wheel and lever. Talk about adhesion! Pinkus had adhesion to burn. With the terrible leverage of his ratchet and screw he could pinch that center rail until it shrieked in agony. An earthquake could not have shaken a Pinkus locomotive loose from its prey.

Next in chronological order comes an American inventor, George Eschol Sellers, whose "improvements in locomotive engines" were given to the world from Cincinnati in 1848. Whether Mark Twain had this inventor in mind when he created

the immortal character of *Colonel Mulberry Sellers* may never be known; but there is a tradition that Mark Twain's *Colonel Sellers* was originally christened "Eschol," Mulberry being substituted before the manuscript was given to the printer.

George Eschol Sellers was the son of Coleman Sellers, one of the earliest locomotive builders at Philadelphia. He died in 1834, leaving his machine-shops, at which locomotives were built, to his sons; George and Charles. The Sellers boys built several engines for the Pennsylvania State railroads before George gave it up and went West to improve the railroads.

By 1848, locomotives in some instances had reached the prodigious weight of thirty tons and more. In a long and elaborate treatise, Sellers pointed out that "the consequences of running such enormous weights at high velocities over the level parts of the road are ruinous in the highest degree to the rails and superstructure of the road."

Engines upon Engines.

Sellers proposed to avoid all the expense and vexation of railroads by building them as cheaply as possible. Instead of heavy grading he would lay his railroad on the surface of the ground with as little preparation as possible. He would also use wooden rails. This would bring the cost of railroading within the reach of all.

Of course heavy locomotives could not be used on such a road; but, then, he didn't want heavy locomotives. On the contrary, he would build them as light as possible so that they could run at the highest speed over the flimsy track without injury to it or to the machine. The only difficulty would be in getting over the hills, and he was ready with a device to obviate this lone drawback.

He would have a third rail in the center of the track on the hills, which was to be gripped by two horizontal driving-wheels, driven through bevel-gear by a separate pair of engines placed beside the smoke-box over the ordinary engines. In order to get adhesion the horizontal drivers were connected by a toggle-joint to which the train was hitched, so that its whole weight hung on the horizontal drivers in going up-hill.

The center rail was also to serve as part of a brake that was certainly effective in theory. The brake was an arrangement like a pair of ice-tongs which was suspend-

ed over the center rail by triggers. When necessary to apply the brake, or rather the anchor, you touched off the trigger, the ice-tongs grabbed the rail, and there you were.

There can be no doubt that the Sellers locomotive created something of a sensation when a model thereof was exhibited in New York in the autumn of 1848. It was enthusiastically approved by the *American Railroad Journal*, and some of the very foremost railroad men of the day actually wrote letters indorsing the device.

Disaster in Spite of Followers.

Among them were Horatio Allen, who ran the Stourbridge Lion, the first locomotive that ever turned a wheel on American soil, who built the Charleston and Hamburg Railroad, who played an important part in introducing the locomotive, and who, in 1848, was consulting engineer of the Erie Railroad; John B. Jervis and B. H. Latrobe, both among the very foremost of early railroad engineers; C. E. Hudson, and John Brandt, a superintendent of motive power of the Erie, were also among those who thought Sellers had made a great discovery. Small wonder if, under the circumstances, Sellers could see millions in it.

The millions seemed just on the point of materializing, but they vanished before the inventor's outstretched hands could grasp them. In 1850 the board of directors of the Panama Railroad instructed John C. Trautwine, then chief engineer, and Horatio Allen to make tests with the Sellers model and report. Their report being unqualifiedly favorable, two engines were ordered, but the Panama Railroad was destined never to have a center rail.

Chief Engineer Trautwine lost his position and Colonel Totten, his successor, took the horizontal drivers, extra cylinders, and ice-tongs off the Sellers locomotives and reduced them to the ignominious necessity of climbing hills like any other engine. Trautwine, who next became chief engineer of the New York and Middle Coal Field Railroad in 1854, recommended Sellers locomotives for use on grades of one hundred and fifty feet to the mile.

Two engines were built and delivered, but the New York and Middle Coal Field Railroad went bankrupt, the engines were sold, and the new owners removed the horizontal drivers and used them as ordinary locomotives.

While Sellers was pursuing his delusion to its ultimate disaster, another American genius was helping the railroads out with a variation on the same idea. This was James S. French, a Virginian, who was so plausibly certain he had hit upon the correct principle for railroads that he actually induced the Legislature of his State to appropriate money in 1850 to build an experimental track and locomotive after his plans.

Document No. 65 of the session of 1857 contains the report of the legislative committee which was appointed to witness the tests of French's experimental railway. It was built on the Manchester side of the river, a few hundred yards above the Petersburg road. It was one thousand nine hundred feet long and had a grade of two hundred feet to the mile except for one hundred feet at the lower end. Like Sellers, French was sure that what the country really needed was flimsy wooden railroads laid on the surface of the ground, which could be built cheaply.

His scheme to get adhesion was to lay flat iron bars six inches wide and five-eighths of an inch thick for rails. The outer edges of these bars projected over the sill two and one-half inches, and as the ends of the ties were cut off flush with the sills there was left a free open space for the adhesion wheels.

The driving-wheels were solid. The cranks were on the outer ends of the driving-axle, while between the cranks and the inner surface of the driving-wheels friction-wheels were suspended from the axle so that they revolved under the outer edge of the rails. They could be pressed up by a compound lever by the engineer, and the axle being the fulcrum, the driving-wheels were pressed down.

Won Praise, but Not Success.

When not in use the friction-wheels dropped by gravity below the rails. A small steam-cylinder was arranged to throw the friction-wheels out and above the rails at crossings and turn-outs. The locomotive weighed three and three-quarter tons, and had cylinders eight by six inches. With the aid of the friction-wheels it took a car containing a hundred passengers up the hill at fifteen miles an hour, but it couldn't move without them. This led the committee to report:

"The mechanical arrangement is extremely simple, and so far as we can judge, works remarkably well. The committee think that Mr. French has offered sufficient evidence of his success to entitle him to the approbation of the general assembly and to further encouragement in his efforts to introduce his very ingenious invention into general use. As a native citizen of Virginia his success may well gratify our feeling of State pride and claim for him our favorable consideration."

This was very gratifying, yet in spite of it French's railway was never heard of afterward.

The Rack Railways.

After all these rosy prospects for American inventors, it remained for an English engineer, J. B. Fell, to reap the honor of building and actually operating the first adhesion railway. It was built in 1863 on Mount Cenis, and was actually used on an eight-per-cent grade during the construction of that famous first Alpine tunnel. Fell's railway had the usual smooth rail in the center of the track.

The engine had two pairs of horizontal drivers driven by bevel-gear, which could be made to press on the center rail by wedges actuated by screws. Fell's road was unsatisfactory and was abandoned after extensive tests, yet it attracted so much attention that it was tried for a time on a steep grade on the Cantogallo Railway in Brazil, and also on a steep grade in New Zealand.

It really performed a great service, however, for its failure led Riggensbach to invent the first rack road, which was the Vitznau-Righi Railway, with grades of twenty-five per cent, built in 1870. To-day there are eight hundred miles of rack railway in operation in the world.

In spite of its conspicuous failures and obvious impracticability the center-rail adhesion idea dies hard. In 1892 H. L. Van Zite, a young civil engineer of Albany, New York, again patented the venerable idea. Finally, as recently as 1907, M. Claret, a French engineer, actually built a center-rail, adhesion railway from Clermont-Ferrand to the summit of the Puy de Dome, three thousand one hundred feet above the town.

M. Claret convinced the directors that neither a rack-rail nor a funicular, as foreigners persist in calling a cable road, for

some reason not explained, was practicable. Therefore they adopted the center rail. The road is nine and a quarter miles long with eight per cent grades part of the way. The gage is one meter. The center rail, which is double-headed and weighs fifty-four pounds to the yard, is mounted on brackets seven inches above the level of the track.

It is gripped by horizontal driving-wheels, two feet eight and a half inches in diameter, at both ends of the locomotive, driven by a chain from the driving-axle and bevel-gear. The pressure on the horizontal rail, which may be anything up to fifty tons, is regulated by air. The locomotive weighs twenty-eight tons.

Thus, after a checkered career of three-quarters of a century the center rail at length has had a chance to vindicate itself. It is still in operation; and, if it holds on for a few years more, may earn a sum equal to the amount squandered in patent fees on the idea.

After all, though, the center rail is lacking in picturesqueness. Also, it is deficient in action. For an original scheme for getting over the hills and one which always gave the stockholders and the spectators the worth of their money, Henry Handyside's scheme was much superior.

Henry Handyside was an Englishman who undertook to find the only true way of getting a train up-hill. He did it, too. He organized the Handyside Steep Gradient Company to build his locomotives. The London and Northwestern Railway, of England, was the Come-on.

It Wound Up Its Train.

Two of the Handyside locomotives were built and were operated for a short time in 1876 on the Hopton incline of the Cromford and High Peak branch of the London and Northwestern, which had a quarter of a mile of seven-per-cent grade.

Handyside's locomotives were English saddle-tank affairs, weighing twenty-two tons, with three pairs of drivers, and cylinders thirteen by twenty inches. The novelty consisted in a pair of winding engines, which worked a winding drum on which was several hundred feet of wire rope back of the fire-box, and an anchor, consisting of a steam-cylinder coupled to a rock-shaft on which were arms that reached down and gripped the tops and sides of both rails. This clutch was connected to the engine

frame, fore and aft, so that it could not slip.

When the train came to the bottom of the hill, the engine was uncoupled, the loose end of the wire rope was hooked into the draw-bar of the head car, and then the engine started off up the hill alone, paying out the rope as it went. When the rope was all out the engine anchored by jamming the clutches down on the rails and the engineer started the winding-engines which hauled the train up, hand over hand, so to speak.

When the train had been brought up it was anchored and the engine proceeded up the hill another cable length, and repeated the process as before, the average time up-hill, including all stops, being two miles per hour. *London Engineering*, one of the greatest English technical periodicals, was deeply interested in this performance, but avoided committing itself either way. This was in 1876.

If Handyside and George L. Vose, of Augusta, Georgia, could only have got together they undoubtedly could have produced a locomotive that would really have been worth while—one that could not only have climbed all the hills that could be brought to them, but could also have got over level ground. Vose wrote a booklet in 1854 to tell railroad builders how to speed up the trains. He was not worrying about grades.

Two Engines in One.

Vose's locomotive, as planned by the inventor, was to consist of two ordinary locomotives built smoke-box to smoke-box. The drivers placed in the center of this arrangement were to be eleven feet four inches in diameter, and were to be without flanges. Thus, according to the inventor, "the passage of curves is perfectly easy." There were to be four cylinders sixteen by twenty-four inches, one on each side of both fire-boxes. The engines were to exhaust into the open air because "the steam would require too early a release to act with sufficient force for effective blast after so long a passage."

Probably the firemen were to help out the draft with their breath or by fanning the fire with their hats. They could have done it easily enough, for there were to be two firemen and two engineers on each of these Siamese twins. If they kept her hot Vose thought there would be no difficulty in running a hundred miles an hour.

Both Vose and Handyside were outdone by a genius who appeared on the scene much later—as recently as 1888-1889, in fact. Railroad men who have got thirty days to go a fishing for the indiscretion of sliding wheels, will find no little consolation in the discovery that in adding those flat spots they were doing just what was needed. C. E. Swinerton, of New York, was the first to discover that the cause of all the trouble with locomotives was that their wheels were round.

An Advocate of Flat Wheels.

To overcome this he patented the polygonal driving-wheel which, as he described it, was "formed by cutting a large number of facets, or flat places on the tread, connected by very obtuse angles, so that when the wheel passes over the rail an inch or more is successively presented in actual contact with the rail, thus obtaining far greater traction than is possible with the cylindrical wheel, which depends for its traction upon merely a mathematical line, a point of contact so slight that scientific works state that if the contact of locomotive driving-wheels was any less than at present locomotion by railway trains would be impossible."

The most amazing thing about Swinerton's polygonal wheel was that it was thoroughly tried out, no fewer than four locomotives equipped with it being tried in regular service on the Boston and Maine. William Smith, superintendent of motive-power and machinery on the Boston and Maine, asserted over his signature that the locomotive "Onward," equipped with the polygonal drivers, had hauled the Portland Express, which consisted of six to eight cars and which made a run of 115 miles, including fifteen stops, in four hours, from January 7 to July 6, 1889, giving good satisfaction and "made her time."

Then the "Onward" started on a triumphal tour to convince the railroad world that wheels should not be round, but got no farther onward than the Jersey Central where, in February, 1890, it achieved a brilliant failure.

Polygonal wheels were tried on engine No. 19 on the Manhattan elevated road, but the *Engineering News*, which had no use for the polygonal wheel, naively alleged that it made a great deal of noise, a statement which will probably be accepted by most folk without an affidavit to that effect.

At the very time that Swinerton was demonstrating that wheels should not be round, E. Moody Boynton was still further improving the locomotive by amputating most of its wheels. His famous bicycle locomotives, built in 1888-1889, had just three wheels and no more, all being designed to run on a single rail.

Boynton's scheme was the usual monorail; that is, it had three rails, two of them being sixteen feet up in the air to balance the locomotive on the other rail, which was on the ground. The standard railroad of to-day is just as much a monorail as the crankiest scheme ever devised if you forget to count half the rails.

Boynton's first locomotive weighed eight tons. It never ran anywhere, but it so pleased the builder that he at once built a second one weighing twenty-two tons. It had one lonely driver eight feet in diameter under the center of the boiler, which had a recess built in it, a sort of wheel-house, to receive it.

The other two wheels were placed tandem under the tank, which was on the same frame as the boiler. The cylinders were 12 by 14 inches; the locomotive was 27 feet 5 inches long, 4 feet 6 inches wide, and 15 feet 6 inches from the rail to the top of the stack. Brackets on top carried guide-wheels running between the two guide-rails.

Eliminated Friction.

Boynton accomplished the remarkable feat of totally eliminating friction—at least, so he said. Moreover, his bicycle railroad could be built at one-third the cost of the ordinary railroad; its trains weighed one-fifth as much as standard trains hauling the same number of passengers. Besides, it could be built right over mountain tops and alongside cliffs on brackets fixed to the wall.

Finally, one hundred miles an hour would be just an ordinary speed for it. Think of it! A hundred miles an hour on brackets on a cañon wall! No wonder Boynton figured out that his royalties at one mill per passenger or per ton per mile would amount to \$70,000,000 per year.

But of all the railroad schemes that ever have been proposed, the most startlingly original was the one which the *Scientific American* described as follows in 1867:

"It is a quick and feasible method of

ascending elevations — cheap, safe, and worthy the investigation of our scientific men and capitalists."

A One-Balloon-Power Road.

This cheap, safe, and feasible method was embodied in "The American Mountain Railroad," patented by Dr. Joseph Auguste Fontaine and described by him in a booklet penned by his own ingenious hand.

Briefly, the American Mountain Railroad consisted of four lines of cylindrical iron rails supported from brackets on two lines of wooden posts considerably higher than telegraph poles spaced about fifteen feet apart. Between these rails ran a wooden platform high enough above the ground to allow a car to be swung beneath. Grooved wheels above and below the platform engaged the upper and lower rails.

To the platform was to be hitched a balloon. When the car was loaded all you had to do was to unhitch the balloon, and away you went, the upper wheels of the platform trundling serenely along the upper rails, preventing the balloon from getting too gay. On reaching the summit a windlass was hitched to the outfit, which was then snaked over to the beginning of the down grade. There water was pumped from a reservoir on the hill-top into a tank in the bottom of the car until gravity overcame the buoyancy of the balloon and down you went.

"Science teaches and experience shows," wrote Dr. Fontaine, "that a very small buoyancy (ten pounds) is sufficient to generate the ascent of a very huge balloon with a high rate of speed; and also that a very little weight is sufficient to generate its descent. A superficial inspection might lead to belief that the balloons of the elevators can be easily inclined by the winds in the opposite direction to that from whence they blow. It is not so. The pressures from the winds are counterbalanced by the weight of the cars."

Apparently the scientific men and capitalists did not agree with Dr. Fontaine, for the American Mountain Railroad was never built. Indeed, if the discouraging truth must be told, notwithstanding all the efforts of genius to simplify the operation, the only method of getting trains over the hill that seems to be known in this so-called enlightened age is to hitch engines to them and snake them over by main strength.

Swarming an I. C. Locomotive.

THE picture on this page shows the boys of the Illinois Central shops, in Chicago, taking a little noon-day airing. They pulled onto the turntable engine 1048, and swarmed her from trucks to sand-dome, that a photograph might be taken for the *Illinois Central Employees' Magazine*, a monthly publication, issued in the interest of the I. C. men. They are a loyal set, proud of their line, and filled with the proper enthusiasm. We take pleasure in reprinting here part of a short article that appeared in the October, 1910, *I. C. Magazine*, by A. L. Chapin, entitled, "Don't Knock—Boost":

One continually meets men with a chronic kick because the other fellow has something better, or is having an easier time, when, if the truth were known, the fact that the other fellow is living easier is due to the absence of the perpetual grouch and the continual nursing of the grouch as a hobby.

If the grouch would pull himself together and take an optimistic view of things in general, he would realize that he is much better off than a large majority of people. Life is what we make it, and the "man above" is hardly inclined to boost when your inclinations are to knock, growl or grumble.

Be not afraid that you will do more than your share, and be ever ready to help the other fellow—you may need help sometimes yourself. Do the best you can at all times and at any old place.

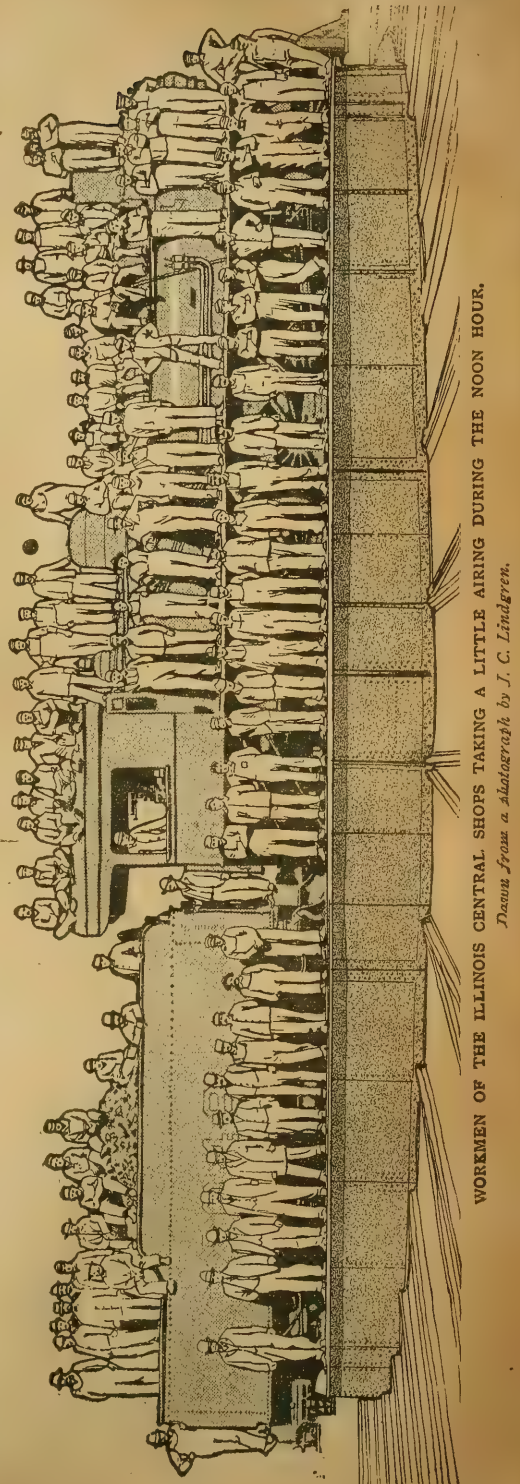
At this particular time of adverse legislation against railroad companies, if all employees would take a hand in the fight to overcome the general sentiment of rate curtailing, etc., things would soon change and the other fellow would sit up and take notice. Don't be afraid to "put in your little oars" for the company which treats you right, and needs your help.

One hears men say, "I wouldn't do that, you're not paid for it." Such employees should be dropped from the pay-roll forthwith, as they not only retard the work of their fellows, but put a stone in the path of the man who would serve his employer conscientiously if left alone.

A man can do more harm in continually growling about his position, his superior, or his pay, than by adopting the alternative. If things don't suit, grit your teeth. Your silence will have a greater tendency to make matters right than will your growls.

Get in and boost, and, if you cannot boost, **DON'T KNOCK**. We are all treated right and better than the average working man, in that we are put upon our honor and expected to perform an honest day's work for fair pay.

When you hear an outsider finding fault with the railroad, remember he is talking about your employer, and if you do not think you can dissuade him from his way of thinking, do not take sides with him. Let the world know, if necessary, that you are proud to be a railroad man.



WORKMEN OF THE ILLINOIS CENTRAL SHOPS TAKING A LITTLE AIRING DURING THE NOON HOUR.

Down from a photograph by J. C. Lindgren.



WINNING A WIDOW.

BY FRANK CONDON.

Is It Lucky for Fireman and Engineer to Travel Together When They Love the Same Woman?



HERE was once a widow in Chicago. There are still widows in Chicago—handsome, dashing, buxom widows—with eyes like the stars, and a fund of miscellaneous information concerning the opposite sex that would make an encyclopedia look puny. There will always be widows in the city on the edge of the inland sea, but if you happened to be connected with the operating department of the Genesee Central Railroad, and knew the facts, as you certainly would know them, you would instantly recall the widow.

Her name was Marie, which is one of the most appropriate names a widow can have. She had a final name, but it doesn't matter now—it is her name no longer.

When Judson took the throttle of the Eastern Limited, he sent in an immediate requisition, the burden of which was, that unless O'Rourke were made his fireman, life would be a dull, drab thing. The Genesee Central people looked over O'Rourke's record and found that he had been firing freight-trains in a thoroughly patient manner for three years, and that there was no particular reason why he should not be appointed fireman on the Eastern Limited. So O'Rourke got the job, and Judson demanded thanks.

"I don't see any particular advantage in this new job," said O'Rourke ungraciously. "I'll have to work a little harder on this

old wreck you run, that's all. If you'd have let me alone, I'd still be sleeping peacefully on the Coal and Iron special."

"You have no ambition," retorted Judson. "I am directly responsible for this promotion, and if you work hard you'll be elected some day to handle a throttle."

"All right, son," responded O'Rourke. "Much obliged for the new job. As a matter of fact, you had me appointed because you need an intelligent human being in the cab with you. Most of the rummies who have fired for you wouldn't know the difference between locomotive firing and locomotor ataxia."

O'Rourke was twenty-nine and Judson had slipped along to thirty-seven. They had known each other for fifteen years, eaten out of the same chowder bowl, slept in the same bunk, worn the same clothes, smoked the same pipe, and loved the same women.

They admired each other's good qualities in secret and openly criticized each other's weaknesses. As often as the exigencies of the business permitted, they hunted each other up, and, consequently, they were the best friends in the world and continued to be such, until—until the coming of the Widow Marie.

This happened months after O'Rourke began firing for Judson. Almost from the very first, the Widow Marie brought a baleful influence into two hitherto peaceful existences.

Judson met her at the annual ball. After he had danced with her until the matter became public scandal, he escorted her to an expensive food hangar, and spent an amount of money buying her choice viands that would have driven his old mother frantic, had she known.

Then, as a matter of course, he introduced O'Rourke. From that vital moment the forces of trouble began to gird on their armor.

O'Rourke discovered the cause before Judson. He was standing before the gate of the big Atlantic, when it occurred to him that a little conversation might help matters along.

"There is no sense in it," he said shortly, looking up at Judson, who was staring glumly out of the cab window.

"There is no sense in what?" replied the engineer, without moving.

"In the way you've been acting lately. You'd think I had suddenly murdered your entire family, by the way you've been treating me. What you need is to have some large, brawny individual come along and hand you a tunk on the cabeeza."

"I don't know what you're talking about," replied Judson coldly.

"I'm talking about Marie," said O'Rourke.

"What about her?"

"Nothing, except that you think I've cut in on your preserves, that's all. I will admit that I've tried to be pleasant to the lady. I've called at her home and she is certainly one swell little widow. I have seen some very dapper widows in my time, but this one leads the army. But the idea of your getting sour thoughts—my, my, my!"

"I don't think I care to talk about this matter. Just drop it," said Judson, climbing down from his seat. "If you'll keep the steam up about twelve pounds, we'll be pulling out soon."

They dragged the Eastern Limited through Illinois and Indiana that evening without indulging in unnecessary conversation. Other evenings followed, all similar, and the breach between the erstwhile good friends began to acquire an appearance of permanency.

The Widow Marie went calmly on her way. Judson had long since passed the last stage of complete sanity, where she was the question, and O'Rourke took an added interest in her because of Judson's hostile attitude.

He visited her as often as he was permitted and spent ridiculous portions of his salary buying her gifts. Friends of Judson said things that in no way contributed to his peace of mind.

On the night of the 26th of September, the heat sizzled and eddied through the roundhouse. In a cab it was almost unbearable, and Judson climbed up the ladder in a temper that needed one harsh word—just one harsh word and then devastation and death.

O'Rourke was late. For the first time since his appointment to the Eastern Limited the fireman was behind time, and Judson pattered about the cab thinking of appropriate remarks.

The excessive heat had acted directly on O'Rourke's disposition and he was boiling in several places when he hurried through the yards to his engine. Oddly enough, Judson said nothing. Neither did O'Rourke.

They jolted the Atlantic out through the yards and down the side-track to await the arrival of the limited from the west. Any close student of human nature could perceive at once that a cyclone was slowly gathering in the cab. Judson poured oil into the monster of steel and steam. O'Rourke busied himself in the cab and occasionally cast an idle glance towards the passenger gates where the usual hurrying, nervous, petulant mob waited for the limited.

She came in twenty minutes late. The engineer and fireman had not spoken a word to each other and it was at Scarsdale that the storm broke. In the comparative silence of the cab, Judson looked across at O'Rourke through a wispy eddy of steam, and remarked:

"You're a cur, aren't you?"

At first the fireman simply stared across the boiler-head in mute amazement. Then the full force of the question struck him, and his bronzed face flushed.

"What did you say?" he asked quietly, looking intently at Judson.

"I said you were a cur."

"Meaning what," continued O'Rourke, still more quietly. His fingers were trembling over the wrench in his lap.

"I mean that and nothing else. You think that I don't know what you've been doing and what you've been saying about me to—to her. You think that you've been a sly, clever dog and that you've pulled the

wool over my eyes; that I don't know how you've been telling lies to her about me and how you've been knocking me just because you want to win her yourself.

"I've always thought you'd play fair no matter what happened between you and me, and now I find you out. I've got friends, otherwise I don't suppose I'd ever have found out what a mean pup you are."

"If you mean all you've just said," replied O'Rourke, rising to his feet and dropping to the floor of the cab, "you're a liar."

Judson half rose, with rage glaring in his eyes. The shrill squeal of the air-whistle halted him midway and he sank back. Mechanically the throttle came out under his firm pull and the Eastern Limited grunted and bucked as it gathered headway.

"I said you were a liar!" bellowed O'Rourke. "You're a chump to believe what you heard—but you wanted to believe it. Who introduced me to that woman? You did."

Judson heard him and turned to answer. O'Rourke was glaring up at him angrily, oil-can in hand, with the light from the fire-box throwing flashes in his face. For five minutes they yelled insults at each other—hot, bitter words that escape from a man's lips when rage has the upper hand. Judson turned suddenly and leaped from his seat straight at his fireman.

O'Rourke threw himself aside and caught Judson on his shoulder. In the same moment, the engineer swung his fist in half a circle and the blow fell with a crash upon O'Rourke's open mouth. The fire-box door clattered back and forth and the blaze from the furnace below outlined the two men as they stood in the center of the cab lunging wickedly at each other.

O'Rourke dropped his oil-can and recovered from the impact of the engineer's blow. He forgot that he was fighting a superior officer and his heavy fist descended, rocking Judson's head. The men backed away from each other, poised a moment and then came together. O'Rourke landed a heavy swing and Judson fought him back madly almost to the tender.

There was no room for fancy fighting in the cramped space. Fist crashed against face, neck, and stomach. For five minutes, the former friends battered each other with every ounce of strength in their bodies.

The Eastern Limited, twelve loaded Pullmans, slipped along into the night, picking up speed momentarily—a rushing monster

on twin strips of steel. At Lisbon, the hurtling mass flashed by a red danger lamp at sixty-five miles an hour. Three minutes later, the trucks struck the open edge of a switch and held. An instant later, the rushing train smashed into the rear of a coal train.

The wreck of the Atlantic was complete. Twelve Pullman coaches jammed her snorting hulk deep into the coal-cars. With a final gasp, she turned over. Judson and O'Rourke went under with the cab.

The wrecking outfit hustled along within an hour. The big crane groaned and creaked as it tugged at the hot mass of coal-encrusted metal. Fifty men leaped forward as the cab rose and disclosed the unconscious figures of the fireman and engineer. Somebody placed a skilful ear to their hearts and announced that they were still alive.

In the third Pullman, Judson and O'Rourke were laid out carefully and the only physician on the train went at them with sharp steel. He found both men badly battered. He noted also, with surprise, that both men displayed facial and bodily injuries that scarcely could have come to them in the wreck.

"They will live," he said.

Judson and O'Rourke came back to their senses almost at the same instant.

The head of each man was supported by a silk sleeve, and the silk sleeve covered the tapering and shapely arm of a woman.

They looked up painfully, as the Widow Marie smiled at them.

"You'll get well," she whispered gently, bending low. "The physician says so."

Judson tried to speak. O'Rourke attempted a brief conversation. The effort threw both into their former state of oblivion.

The injured men were hurried to Chicago and placed side by side in a hospital. The nurses worked over them determinedly, but it was more than a day before O'Rourke opened his eyes again. Judson lay five feet off in a peaceful slumber.

"What happened?" O'Rourke asked the attendant. "We were wrecked, weren't we?"

"You ought to be glad you're alive," said the nurse smilingly. She was seated at O'Rourke's side and in her lap lay a morning newspaper. "This is what happened."

She held the open paper before the fireman's eyes and he read the account of the wreck painfully and laboriously. Half-way

down the column he ceased reading and stared uncomprehendingly at a sub-heading which ran, "Angel of Mercy Aboard Wrecked. Flier."

Then he remembered. What followed assisted him. It told of a beautiful woman, a heroine. She had plunged into the worst of the wreck; she had given the injured men every possible aid; she had helped the surgeon as he worked over them and she had held their battered heads in her arms.

"The Widow Marie," O'Rourke muttered, as he read on.

"While her husband of a few hours labored to restore life to the two mangled trainmen, this beautiful bride, etc. etc.," ran the article. O'Rourke kept his eyes open by a violent effort and continued down the column.

The Widow Marie had married the surgeon that morning. They were beginning their honeymoon. Fortunately, they had

taken the wrecked train, and were thus able to render valuable assistance. The surgeon's name was Manners. O'Rourke brushed the paper from him with his unbandaged arm and turned to the sleeping Judson.

"How soon will he wake up?" he asked.

"In an hour or two," replied the nurse.

"Are you sure?" murmured O'Rourke sleepily.

"He should awaken then or a little later."

"I'm pretty tired—pretty tired," continued the fireman; "but I'll wait until he awakes. Will you please look at that newspaper again and tell me the name of the doctor who was on his honeymoon with the beautiful lady who held our heads."

"His name was Manners," replied the nurse.

"Manners—Manners. Thank you," said O'Rourke. "Judson will probably want to know."

When Bill Was Boss.

BY CY WARMAN.

And It Came to Pass that Bill Is Now the President of a Great Railroad
and the Judge the Governor of a Great State.



SOON after he had emerged from the dewy dawn of his railway career, Bill got a night-trick at Detroit, and in a short time was made trainmaster, for he was a steady worker and one of the best listeners on the West End.

An enterprising traveling passenger-agent conceived the idea of persuading some of the people of Bay City to circulate over a part of the Grand Trunk, to visit Detroit and see Belle Isle bust the river wide open, and told Bill of his plan. Bill listened, wide-eyed, to the rosy pipe of the passenger man, and in a few days the latter went to it. Scores of people said it was a good idea, and some said they'd go, sure.

Unfortunately for the affair, however, it began raining in the early evening of the day before, and on the morning set for the excursion it was still pouring. About noon Bill got a wire from the T. P. A., dated Durand, saying: "Still raining; only one excursionist; what shall I do?"

Bill answered: "Chain the poor boob to the seat and run him through to Detroit. We can't have anything fail on the West End."

In due time Bill became superintendent, and was sent down to a certain city where the force was all flat-wheeled from being too long in one place. Bill had been notified that the baggage department at the East End wanted icing, and, finding it in pretty bad

shape, he wired the head of that department: "Send help, quick!" The answer came: "Sending Thompson."

Thompson took his place in the baggage-room looking very much like the bulldog in the express picture.

Next morning one of the excess boys blew in and saluted the new baggageman.

"Here, Cholly!" he called airily. "Check me this box to Kingston." As Thompson placed the box on the scales the other man laughed loudly.

"Evidently he is new on the job," thought Mr. Excess.

"That'll be a dollar," said Thompson.

"Oh, I guess not—D. H. and P. D.," said the other with a smile, as he shoved his hands deep into his sack-coat pockets, squared his shoulders, and turned to leave.

He glanced back, but as Thompson had only rolled the box to one side, he came back, leaned over the low counter, and said: "Check, please."

"Dollar, please," said Thompson.

"Say, are you trying to be funny?"

"No," said Thompson.

"Know anything about *me*?"

"No."

"Know anything about anything?"

"Some."

"Well, I'm goin' to report you to the sup, right now."

"He's up-stairs."

"Don't you give me any lip!"

Thompson went on with his work, and Mr. Excess hit the third step from the floor and went up. He knew Bill by sight, and, pulling up in front of the superintendent's desk, he began to tell his story. Bill just looked and listened. When he finished, Bill was still looking and listening.

Mr. Excess thought Bill didn't understand, and started in to tell it all over again. Presently Bill asked:

"Who told you that?"

"Why, your new trunk-wrestler."

"Sure he was the baggageman."

"Nothin' surer—got the literature on his headpiece."

"And he told you that?"

"Sure."

"Well, I guess he knows. He's the baggageman."

Mr. Excess went down slowly, produced a dollar, got a receipt, and said:

"Say, Mr. Wise Guy, do you know somethin's goin' to happen to this Jim Crow, jerk-water parody on a railroad."

"Yes?"

"Yaas! I'm goin' to send everything I sell over the C. P. after this."

"Then," said Thompson, "I presume the Grand Trunk will stop buying supplies from Black and White."

That made Mr. Excess sit up and think. Still, he had a little fight left.

"It's lucky for us you don't do the buying."

"No; but I'll let 'em know how you feel about it."

Presently Mr. Excess came back, and said: "Guess we'll call it off, eh?"

"Too late," said Thompson. "Just dropped an R. R. B. in the mail."

Mr. Excess became nervous.

"That's your train," said Thompson, as a ticket-taker bellowed "Board!"

"Look here," pleaded Excess. "You stop that report, or I'll lose my job."

"Can't stop that."

"Then send another. Kill it, and you've got my freight for life. Here's my hand."

"All right," said Thompson, as the tamed traveler sprang for the last car.

In the course of railway events, Bill became general manager of a considerable railroad which had fallen into the hands of a receiver. This latter official was a judge—he's a Governor and Presidential possibility now—and he started out to look the line over, to cheer the live ones, and remove the dead ones.

When he stepped ashore at Detroit he was somewhat surprised that the G. M. did not appear to make him welcome, and, incidentally to water his own stock personally. Presently the judge observed a stout man looking at him with big, frank eyes.

Each looked steadily into the eye of the other for several seconds, when the judge ventured:

"You're Mr. So-and-So."

"Yes. You're Judge Blank."

"Yes."

When they had looked and listened for a long time the judge side-stepped slowly and leaned on a fence. Bill followed, and, facing each other again, they both said nothing for a spell. Presently the judge spoke.

"Well, I guess we understand each other now. Like to have you stay on the job."

"All right," said Bill.

Of course, I'm not mentioning any names, but William is president of the Pere Marquette now, and the judge is the Governor of Ohio.



Told in the Smoker.

BY RICHARD MAXWELL WINANS.

The Things that Happen to the Captains of the Grip in the Day's Run
Are as Varied as the Lines of Goods They Carry, and as
Exciting as Some of the Stories They Tell.

HOW THE RAILROAD PAID.



HERE were three of us in the small smoking compartment on an afternoon train east-bound out of Asheville, North Carolina. Paxton had covered his territory as far down as Mobile with a line of hats, and Welling was just in from the Mississippi Valley, where he had been showing dress goods.

About the time we were comfortably settled, the train slowed up before the little station at Biltmore. Among the passengers who came aboard there was a middle-aged farmer who entered the smoking compartment and took a seat opposite me. He was a seedy individual, not only in his dilapidated exterior, but in his manner as well. He was a good type of the mountaineer class of tar-heels of that section.

He didn't wait for the formality of an introduction, but immediately put himself in communication with any one mutually inclined. He impressed me as being a man with a great mental burden who was looking about for a little assistance to help tote it around.

"I done reckon," he said, in a tone of inquiry, looking directly at me, "that you-all am gen'elmen from the No'th?"

"We all live in New York," I replied.

"Well, sah, in that case I don' min' confidin' in you-all, an' trustin' to yo' honah not to—"

Just here his confidences were rudely interrupted by the appearance of the conductor in the doorway with his polite request: "Tickets, gentlemen!"

Each of the occupants of the compartment pulled out a mileage book, except one man with a strip ticket, and the farmer, who presented the most woful countenance I have seen outside of a funeral.

The conductor waited a decent length of time for the man to produce a ticket, and then said firmly:

"Ticket, please, sir."

The man with the woful face had been looking at his hands, which were nervously clasping and unclasping on his lap. When the conductor spoke, he looked up, and I saw tears trickling down his wrinkled face.

"Please, mistah conductor," he said, half choked with strong emotion, "I'm a po'h lone man, an' I'm in a pow'ful lot of dis-

dress. I haven't a cent in the world and my only daughtah is dyin'”—here he almost broke down, but he choked back a sob and continued—“an' I want to see her again befo' she passes ovah to the othah shoah. Please don't put me off, mistah conductor. It's down at Statesville that she lives. It ain't very far down thar.”

“Well, I'm very sorry for you,” said the conductor, with a touch of pity. “But you see, sir, I can't help you out by giving you a free ride on this train. I'm sorry, but orders are orders, and you will have to get off at the first stop we make, which is Marion. That is quite a way down the line and will give you quite a lift on the trip.”

“See here, conductor,” said Welling, who was much interested in the little scene, “that's all right. We are all gentlemen here. No one will ever be the wiser if you let him ride through. Pass him along, and let him go to his sick daughter.”

“I haven't a doubt but that you are gentlemen, all of you,” the conductor replied, “but I've a tip that there is a ticket auditor on this train, and if he checks me up after I've done collecting, why I'm going to be short if I pass this man. That's worth as much as my job. No, I can't take any such risk to-day.”

“Well, then,” said Welling, “I'll pay for his trip. What is the fare to Statesville?” and he pulled out a roll of bills.

“Oh, no, you don't! Not on your life!” the broken-hearted man almost shouted. Both the tone of his voice and his diction had decidedly changed. “I won't let any man do that for me; though I thank you just the same, sir.”

As he spoke, he drew from his inner coat-pocket a big bill-case packed tight with yellow boys, from which he selected a twenty and paid his fare. The conductor, after collecting the fare, gave us a look of compassion and passed out the door.

“Gentlemen,” said the farmer as the conductor slammed the door, “I owe you an explanation and an apology for what has just happened.”

“All right,” said Paxton, giving Welling a look that made him feel uncomfortable, “we are all good listeners. Fire away.”

“Well, it's this way,” continued the would-be free rider, passing around a case full of good cigars. “About five years ago this here railroad killed a mare of mine—a fine roadster, too, she was—run over her

in broad daylight, before a dozen witnesses.

“She got onto the tracks because of a gap in one of their rotten fences. I sued the company for three hundred dollars, but their cussed lawyers beat me out.

“Ever since, I've been trying to get that three hundred out of 'em every way I could, and, by hook and crook, sometimes one way and sometimes another, I've managed to beat 'em out of two hundred and ninety-six dollars and fifty cents. It was the other three dollars and a half I was trying for just now. I failed this time, but I'll get the money yet.”

WHEN PURDY PAID UP.

“WELL,” said Paxton, when the man had finished, “I take off my hat to you for hanging on till you get even. However, you haven't much on an old friend of mine for dogged patience in waiting for an opportunity to even up a score.

“There was Purdy,” said Paxton, “I guess you fellows remember Purdy when he was traveling through the South for a firm of overall makers.

“One trip, when he was working Asheville, he met another drummer carrying the same line out of Chicago. Although they were working the same territory and were strong competitors, they came to be very fast friends, sometimes going so far as to split up a town between them or working separate towns in the same territory and dividing the orders at the end of the week.

“Some time after their acquaintance they met in a hotel in Raleigh, and a few minutes' conversation developed the fact that both intended to work the same towns on one of the roads leading out of Raleigh. Each of them had calculated on working four towns during the day.

“It was summer-time, during one of those hot spells that just about meets a Northern man in the South; so, when his friend Harris suggested a community of interests, Purdy instantly accepted. Neither was falling over himself to make those burgs the scene of a heat-selling contest.

“There were seven towns. Each took three, agreeing to meet at the seventh at the end of the day's work. When they reached it they put up together in the same room at the hotel.

“Both men had done a rattling good day's business in the towns he had cov-

ered; but both were fighters, and, in order to keep in practise, they agreed to fight it out over the business in the last town the next morning.

"They went to sleep, joking about the hot fight each was going to give the other on the following day. Purdy was a very heavy sleeper, and had said that he would leave a call with the hotel clerk; but Harris told him that he always woke early, and that he would call Purdy when he arose—so Purdy let it go at that.

"But Harris did not keep his promise. In fact, he hadn't intended to. When Purdy finally awoke it was after eleven o'clock. Harris had not only gone, but had locked the door.

"By the time Purdy dressed and was able to get out it was after noon, and when he got down-town he found that Harris had sold every customer in the place and had taken the limited to Raleigh. He had left a note at the hotel for Purdy, saying he was sorry that he forgot to call him; and that, as he had only a few minutes to catch his train, he wasn't able to drop in to say good-by, which he regretted.

"They met several times after that, but neither referred to the incident. Purdy was waiting his chance to get even, and he waited nearly six years before the opportunity came.

"They were both working the same territory in the southern tier. Fever was raging on the Gulf Coast, and a shotgun quarantine had been established in southern Alabama.

"When Purdy landed in one of the best towns in that section he learned that Harris was to arrive the next day. Here was his chance. Without hesitation he went to the excited authorities of the place and informed them that he knew of a man who had been exposed to the fever in southern Mississippi, and who had declared his intention of defying quarantine and coming into town the next morning.

"Beside giving them Harris's name, he furnished them an accurate description of him, and the officials were soon carefully watching every train that arrived. When Harris finally landed he faced a dozen shotguns in the hands of the local authorities, who, despite all protests, placed him in the pest-house, and kept him there for a week.

"In the meantime, Purdy was unusually busy. He worked and secured all the busi-

ness in every town in the surrounding section. Before he left he wired Harris his congratulations, with a very pointed reference to old times and an early call. Harris thought it was just a bit more than an even game, and he has been gunning for Purdy ever since."

THE PERFDY OF THE PLUG CUSTODIAN.

"WELL," said Welling when Paxton had concluded, "I hope he has better luck than two other fellows and I had in our attempt to get even for the trick played on us by a fellow traveler on a trip over in Tennessee a couple of years ago.

"We four fell in together in a little town, and ran into a combination of circumstances that would make a good comic opera.

"We stopped at the best hotel, but it was one of those slipshod places where they have four rooms with baths and only one bath-tub plug. When one of us got ready for a dip he had to call the porter and have him beg the holder of the precious plug for a loan of it.

"As you can imagine, this was pretty awkward at first; but toward the last we four got together and formed a close organization which we called the 'Independent Order of the Knights of the Plug.'

"We had a constitution and by-laws, and formulated rules by which we swore to govern ourselves with regard to this very desirable and indispensable article. We agreed upon a schedule of hours when each was to have the plug, and the order in which it was to be rotated among us.

"We also placed a time limit on the period for keeping the plug. A system of fines was established for keeping it over-time.

"The fines thus collected were to be donated to the hotel management at the end of our stay, together with a pertinent recommendation that the money be used to purchase a full supply of plugs for our next visit.

"Quite a sum was realized, however, and we decided at the last moment to amend the constitution and spend the money in a way that would give us pleasanter results. To this end we concluded to give a banquet for the members of the I. O. K. P.

"The funds of the order were turned over to a committee of one, who was to

arrange for the feast. When the time came for the banquet we waited and waited about the door of the place where the spread was to be served.

"The man with the funds had not yet arrived. After the end of an almost interminable time, when our patience was altogether exhausted, a messenger came with a note, which read as follows:

FELLOW MEMBERS, KNIGHTS OF THE PLUG:

I received a telegram this afternoon from the house calling me in. I had no time to communicate with the other members, so I have taken the afternoon train for Chicago, finding the funds of the organization very convenient as expense money. Also, which will perhaps be even more reprehensible in your sight, I took the plug with me. I had become so attached to it that I just couldn't bear to part from it.

So I have gone—plug, money, and all. I have no excuse to offer except that I couldn't stand to think of you fellows making merry at that feed without me, and I knew you couldn't have the extra eats without the price.

Forgive me, as you hope to be forgiven for stopping at a hotel with four bathtubs and one plug. I don't believe it will be laid up against me in the final judgment—that is, if you fellows ever get a chance at me before that time. Yours brazenly,

CUSTODIAN OF THE PLUG.

"Well," concluded Welling reminiscently, "I guess you can imagine what a disappointed lot we were. It was too late to get him back and mob him!"

PAXTON'S HOT BATH.

"**S**AY, but you were lucky, though, to have a real bath-tub," laughed Paxton. "It isn't every place in the South, even to-day, where you can have that. The South has awakened, all right, and is booming along; but even now in some of the little back-country towns the hotel service is about the limit, even to a fellow who knows what it is to rough it.

"I'll never forget an experience I had one evening in March down in the wilds of Kentucky. I had driven thirty miles that day over mud roads, and I was wet and chilled clear through. Arriving at the hotel, which had the outward appearance of being quite comfortable, I inquired if I could get a hot bath. To my delight, I was told that I could.

"I went to my room, disrobed, and,

throwing a bath-robe around me, I called the negro porter. At his command I followed him down the corridor. Outside a fine rain, half snow and sleet, was falling, and a high, piercing wind was blowing.

"By and by we emerged upon the latticed back porch on the second story of the hotel. There in a latticework that was covered with vines in summer stood a bathtub, into which the negro boy had dumped a couple of buckets of steaming hot water.

"The latticework was all open, and the flaring lamp, sizzling as the snow-flakes struck its hot chimney, revealed me to all the neighbors in the rear of the hotel. After I had sized up the situation, I tried to tell the porter, my teeth chattering till they fairly snapped, what I thought of such an arrangement, and passed up my bath in as good order as was possible under the circumstances."

"Well, you had the advantage of hot water, anyway," said Welling. "That's something they didn't give me down in Georgia, when I asked for a bath after I'd come in from a hot day's work. I told the proprietor of the little two-by-four hostelry that I wanted a bath, and he turned me over to the colored boy, who led me out to the wagon-shed.

"He told me there was 'rangements fo' washin' out there. I was piloted to an abandoned granary to disrobe, after which I was to step 'ovah to th' othah end whah th' rangements was."

"When I got there I found the boy waiting for me with a line of hose in one hand and a big palmetto-fiber scrub-brush in the other, ready to turn on the water and give me a bath, together with a regular horse-carrying with that wire-edged brush.

"The water in that hydrant was from a tank filled by a windmill from a well, and cold enough to freeze the marrow in a fellow's bones. I forswore the bath, and also swore at the 'rangements."

A PATENT CYCLONE-CELLAR.

"**S**PEAKING of arrangements," continued Welling, "I had an experience once that beat anything I've ever run up against. It was in my early days of traveling, when I was selling farm-machinery in western Kansas. I had struck some queer hotels, but the oddest lay-out of all was owned and operated by a genius named Sellers, and I'm willing to wager he was

some relation to old *Colonel Mulberry Sellers*. His place was in a little village in Sheridan County, about eighteen miles from Hoxie.

"Sellers was a queer character. His specialty was invention, and he was always telling of his dreams of that proverbial million. I suppose he had invented more worthless things than any man. Almost everything he made would work, but they all required more time and labor than the things he had tried to improve.

"His barn-lot and his barn, as well as his little one-story hotel, were filled with the things he had invented, and I really think he was only handicapped in his inventing mania by lack of space to store his creations.

"When I first called on him for accommodations, he put me to bed in a small room, possibly not more than eight by ten feet, with one small window and an extremely narrow door. One peculiarity I noticed as he showed me into the room was that the place appeared to have double walls. He had the reputation of being a fine old chap generally, or I would have felt a bit squeamish about occupying the room.

"The night was unusually sultry and close. With only one window open at the top, there was little ventilation. During the night, I was aroused from a sound sleep by a creaking, jarring, and rumbling. The first thought that flashed into my mind was that a cyclone had struck us. With a bound, I leaped out of bed and ran to the window.

"As soon as I touched the floor, a sickening sensation of falling came over me. Everything was as dark as the Black Hole. In my excitement, I rammed my arm clear through the window, and was dumfounded to the point of speechlessness when my fist struck solid earth.

"To say that I was terror-stricken isn't overdrawing it a bit. I was on the point of doing something desperate, when, with a sudden jar, the movement ceased and we began to ascend again, and then stopped suddenly.

"Just as we stopped, a gust of wind struck me through the open window, and I was about to climb out through the opening when Sellers opened the door and asked in a triumphant tone:

"Well, how did she work? Were you scared, mister?"

"In no very mild language I demanded an explanation of what had occurred.

"Cyclone," was his cheerful reply. "Took the hoss-barn and two haystacks clean,

pulled the windmill up by the roots, and mussed up the best part of town. I thought it was going to hit this shack, and so I let you down."

"The next morning he showed me the mechanism of his arrangement. Every sleeping-room was, as I had surmised, a double room, the inside being on the same principle as an elevator. He had rigged up weights and counterweights on these elevator-rooms so that by working a small windlass he could drop all the sleepers in his hotel down into the cellar until an approaching cyclone had passed over."

WHY HE ASKED.

"THAT reminds me," said Paxton, "of a cyclone I once took part in out in Kansas. I was selling windmills and pumps those days, and the hotel accommodations weren't anything to make a boast of in the territory I was covering.

"One night I had to double up with two cattle-drovers in one dinky little bed, and I thought that was going some. But the limit was reached, three days later, when I came to a small town, tired out from a long drive across country, and inquired of the only hotel in the place for quarters over night.

"The hotel proprietor said he regretted exceedingly that he had but one small room, and that was occupied, but he hoped I would not object to doubling up with the occupant, who had already retired.

"He lighted me up to the room, showed me the bed, put down the light, and as he started to leave he asked casually:

"I suppose you have had smallpox?"

"No, I have not had smallpox," I replied, wondering at the question.

"Well, that's bad," he remarked, and added cheerfully, as he again turned to the door, "but I suppose it can't be helped."

"He was about to close the door, when I called after him:

"Say, what has smallpox got to do with this deal?"

"Oh, nothing," he answered coolly, "nothing—only your bedmate has it!"

"Right then is when the cyclone started. It was a double-header the length of the hall, all the way down a flight of stairs, through the cluttered-up little office, out across the porch, and into the starry night, finally winding up on the north side of the horse-barn, where it just naturally flickered out because I was winded."

THROUGH BY SUNRISE.

BY WILLIAM S. WRIGHT.

SYNOPSIS OF PREVIOUS CHAPTERS.

HERMAN TILLMAN, whose real name is George Clifford, son of a titled Englishman, has earned his father's displeasure by marrying the daughter of a Commoner and has sought seclusion on a small island off the Scottish coast. Here he is traced by his father's secretary, Peter Raymond, who for his own evil ends leads the villagers to believe that Tillman is a murderer, forger, and robber. An old minister, Mr. Moreland, who has come from Tillman's father, is assaulted, and Raymond tries to lay the crime at Tillman's door but is, himself, accused by Moreland. The old minister has been instrumental in winning the father over to the extent of providing a yearly allowance for his son, with the proviso that he and his family leave England and settle in America. They are wrecked and, in the excitement of manning the life-boats, Clifford disappears.

CHAPTER VI.

In an Open Boat.



THE life-boat in which George Clifford was being lowered to the sea, a block that had in some way become detached from the rigging fell and struck him on the head. He was rendered unconscious, but his body in falling struck squarely in the boat that was being lowered at the time.

Several of the excited sailors, imagining that he was killed, actually kicked the body under the seats of the boat, for, be it known, a life-boat is unusually large and roomy and its peculiar construction makes it safer in a heavy sea than an ordinary ship.

It was useless to ply the oars in order to make any headway. All that the sailors could do was to keep them in the water in the hope of steadying the boat as much as possible and wait for the terrible storm to subside. This they did, the terrible blackness only adding to their horror.

The heavy sea dashed over the boat, drenching the men. The able-bodied seaman knows how to brace himself against such an enemy, however, and when he understands that the boat, if not loaded too heavily, will ride the waves like a cork, he knows that he is perfectly safe.

He is much safer, in fact, than he would

be in a large steamer or sailing vessel, for the great weight of such craft puts them in the position of a buffer, and the waves are liable to dash them to pieces while the vessel is trying to ride them.

When morning dawned, the sea had somewhat abated, and the cliffs of Dover on the Maine coast stood sheer and high in the distance.

Though famished and weak, the men plied the oars willingly. They estimated that it would not take more than an hour to make a landing. They knew the coast well.

They had not paid much attention to Clifford, but some time during the night, the terrific onrush of the cold water had brought him to his senses, and he faintly realized that he was in an open boat at sea.

He thought of his wife and little ones and prayed that they were as safe as he at that moment. The thought that they might have perished unnerved him so that he could not keep his mind at ease.

The position he was forced to occupy in the boat was more than uncomfortable, but he bore it with fortitude, and a kindly sleep robbed him of further torture.

A few hours after the men had sighted the Dover cliffs, Clifford awoke. The bright day startled him. He sat up, rubbed his head and looked around. There he was in a large open boat. Five lusty men—some in oil-skins, others with scarcely any cloth-

ing on—were tugging at the oars with all their strength.

Clifford looked around. The air was crisp and cool, the sun was shining brightly, and the greenish-blue sea with its succession of whitecaps somewhat fascinated him.

His first thought was one of thankfulness for his own life. As for his wife and children—if a merciful Providence had taken them from him, he would bear up bravely under the strain and let the terrible visitation make a better man of him. It would not suffer him to do otherwise, he said to himself. He would take it all philosophically.

But we cannot always do what we wish to do the most.

He looked at the men plying their oars and they looked at him.

"Are we safe?" he asked, his voice trembling with suppressed emotion.

"There is land ahead, sir," said one of the men. "It will not be long before we pull into shore."

"Where are we?" he asked again.

"Dover cliffs are on our bow, sir. If I know my bearings, and methinks I do, sir, we are not far from Devon."

"It was awful," said Clifford, recalling the storm that had separated him, perhaps forever, from all on earth that was dear to him.

"A bad storm, sir," went on the sailor who was acting as the spokesman.

There was a long pause, and then Clifford asked:

"Is this the only boat launched?"

"We were trying to launch them all when the full force of the gale struck us, sir. I saw one of them cut loose from the davits and swamp," said the spokesman. "I have been in a good many blows, sir, but that was the worst—the most sudden."

Clifford pulled himself up into a seat alongside one of the men.

Eagerly he scanned the now placidly beautiful water—but there was no other boat to be seen:

"I have seen no boat, sir," went on the sailor as if anticipating what was in the mind of the searcher. "When we got away, I pulled in the direction of the shore. It was very hard to discern anything, but I do not think that the old hulk stayed on top long after this boat-load got away."

"My God!" Clifford hid his eyes for a moment.

"I wouldn't be surprised if this were the only boat-load saved."

The words cut Clifford to the heart. The man meant to be kindly and sincere. He did not know the terrible force of that statement which pierced the heart of the grieved man as a blade pierces flesh.

CHAPTER VII.

At South Devon.

AS they pulled into a little cove near South Devon, Clifford gave a sigh of relief. The men had naught to say. They abandoned the boat and hastened to the nearest exchange to report the disaster, after bidding "good-by" to their grief-stricken passenger.

Soon the news spread through the little town and scores of people left their homes and their businesses to journey down to the beach where the boat stood—a grim spectacle of the terrible night.

Clifford made up his mind that he would stay in Devon until some news of his wife and children came to him. Day after day he went down to the edge of the cliffs and watched and scanned the great ocean for some tidings. He took the solemn oath that he would not return to his father or tell him what had happened. In the years to come, he would find surcease in his despair alone—if Fate had separated him forever from them.

He decided to return to England. So he took the first steamer for Liverpool, and went to live in Devon because it bore the same name as the American town in which he had landed.

He stayed in Devon, found employment in a draper's shop, and lived with the greatest frugality. Every penny that he did not need for his living expenses he put away, for he intended to make occasional journeys to America in the hope of finding his loved ones if they were still alive. All that Lloyds could tell him was that the ship had never been heard from and was reported to her owners as a total loss.

Tiring of Devon and having saved sufficient money he made a trip to New York. In the big American metropolis he found work and prospered, and he grew to like America so well that he resolved to make it his future home.

Time wore on and he prospered more and more, and then came the day when he fully

realized that there was no further need to search so blindly for the wife and little ones.

They had undoubtedly gone to their eternal rest in the ocean on that fatal night—now ten years ago. If they were alive, he would have heard from them.

In the course of time, Clifford became an American citizen and established his home in New York. He had been in correspondence with his father and had received his allowance, but when he renounced the British crown, his father asked to see him no more. That was more than he could stand.

But Clifford did not desert England altogether. He made frequent trips to South Devon, and in the little church there he erected a memorial window to his dead. He resolved too, that he would make frequent journeys to the little town—perhaps every summer.

CHAPTER VIII.

The Nightingale.

A GOODLY portion of the summer of 189—, had been spent by George Clifford in England. It included a lovingly remembered fortnight in South Devon, so dear to him—a land to whose ruddy headlands and topaz sands the Gulf Stream, tired of its lonely windings across the Atlantic, gives warm kisses of welcome.

Devon not only receives a largess of quaint and beautiful seaweeds and brilliant-hued fish and water like transparent sapphires, but other beauties that are not for less lucky coasts. The Devon air is ever bland and luscious, and the dialect of her people is full of softened consonants and emphasized vowels. Her maidens are famed for eyes of the hue of the deep waters off Mount Edgecomb.

Yet aside from its tender memories and the memorial window, the thing that made the memory of Devon dear and lasting to Clifford was just a little bird.

Clifford on one of his journeys from New York, had as a fellow passenger on the Altic a fine, sturdy, mahogany-faced specimen of the British squire, who, like himself, detested cards and preferred a quiet talk in the saloon or a promenade on deck.

George Trelawney was his name, and he was lord of one of those English country homes which is a big spreading structure of gray stone, covered with ivy, and lichen

stained, laced with running-roses and bowered in apple orchards, with a trout stream pulsing through the surrounding grounds. From a gorse-clad slope, one could glimpse the play and sparkle of the Channel.

"Run down and see us at Lynntor when you've nothing better to do," said the squire, with a touch of Devonshire dialect.

Clifford went to Lynntor, and the first night at dinner his host said:

"Mr. Clifford, you have no nightingales in America?"

"No," replied Clifford, adding with instinctive patriotism, "but we have mocking-birds."

"So I've heard, so I've heard, and fine singers at that, I'm told. But our nightingales are a bit different, I believe, in their—in their—"

"Technique," ventured Mrs. Trelawney.

"Thanks, dear," replied the squire.

"We generally go and listen to them if the night is fine. They're only little brown birds, but as a substitute for grand opera, they're not bad. Would you like to hear them?"

"I should be delighted," replied Clifford.

In the late twilight, the party started. A quarter of a mile back from Lynntor was a copse, its ledges fringed with clusters of primroses, whose blossoms shone luminous through the dusk. From the copse itself came many fragrances, including those of countless violets. The air was rich and sweet and full of hints of small, sleepy bird songs. In the hedges, the glowworms looked like blobs of brilliant emeralds.

The squire indicated the gnarled knee of a big oak as a seat for his guest, arranged shawls on a grassy slope for his wife, and was in the act of lighting his brier when from a point not far distant in the wood came a tremulous burst of exquisite melody.

The squire slid quietly down by the side of his wife, dropped his match, and nodded to Clifford, who nodded in return. The unseen minstrel's notes grew faint, swelled again, quavered, stopped, and then filled the night with music.

The far-off recesses of the copse yielded an answering song. The nearer bird replied in those liquidly tender phrases that make the nightingale's hymnal so infinitely sweet and so entirely sad. It was, so Clifford said afterwards, as if a lover was telling his love to her who loved him and who yet was saddening at the moment of his triumph, knowing that neither love nor beauty last.

Then, too, there was a longing for things beyond, inspired by the music that seemed woven out of the magic and mystery of the perfect night. Clifford listening, felt much that he had not felt before. Most did he feel the rebuke that the aspirational purity of the tones conveyed to him. It was as if an angel had come to him in the being of his wife and children. So his eyes were misty and his heart beating heavily when they started home.

CHAPTER IX.

Back in New York.

HE was back in New York once again. His cozy apartment seemed more like home than ever.

Nor was his pleasure in his habitation diminished by the discovery that he had desirable neighbors on the other side of the hall.

There were four of them and they were unmistakably bachelor-maids at that. They were young, good to look upon, possessed of a certain dainty self-possession many degrees removed from effrontery, kept no servant, usually came in burdened with divers parcels and made their abode tuneful at night with girl chat and a piano.

The walls of the Lysandria Apartments being not too thick, Clifford shared in their talk and their music to the extent of hearing a pleasant, if unrecognizable, medley of both.

The Lysandria was a Bohemian caravansary of the better class. The dwellers within its walls were for the most part writers and artists. The histrionic element was sparsely represented by a few of the lambkins from the fold of a neighboring dramatic school, innocents whose papas and mamas paid big fees in order that their offspring might learn much which they would have to unlearn if they ever "backed the lights," which ninety-nine per cent of them never would.

Clifford, after a chance meeting or two with his neighbors on the stairway, decided that the tall girl with the pretty face and tired mouth was a newspaper woman; that the dark, plump little soul, was in business—a stenographer or bookkeeper; that the young woman with the corn-silk hair and dainty figure was a prospective Maude Adams—or thought herself to be.

But the last, she of the white forehead,

placid gray eyes and trembling lips, who was usually dressed in brown and had such an indefinable charm, was the one that attracted him most.

Clifford after many guesses at her occupation gave it up, but he discovered that she seemed to be at home more than the others, and that she it was who was responsible for most of the music at night and all of it by day.

But what attracted him most was that she appeared to be an indefinable memory of his. He had a vague, haunting impression that he had been with her, or talked with her, amid surroundings that were dimly dear or somberly sweet.

An inquisitorial review of his woman friends of the past, and even his mere acquaintances, resulted in nothing save the conclusion that he had never met the girl in all his life.

"In all my life," he said to himself, as he dabbed mechanically at a bit of moonlight on a nearly finished canvas, for he had taken up painting to while away his idle hours.

"Perhaps not in this life, but in some other life when I was—I was"—here he dropped his maul-stick, thoughtfully filled his pipe, and smoked dreamily.

"When I was what? This is queer! I was—unless I'm going dotty on the subject—about to get to the very verge of the little break in the recollections that lead up to her, and then—then I come to a dead stop. This kind of thing hints at the reincarnation chaps being on the right track after all. Yet it might be inconvenient, not to say unpleasant, if we could chuck bridges of memory over to our own and other people's defunct pasts. Suppose I discovered that a couple of eons ago, I borrowed the equivalent of a thousand dollars from that cad Dauber, and didn't make good, and Dauber had a similar revelation. Of course, the debt would be outlawed under the statute of limitations, but Dauber would talk horribly."

Clifford rose and took off his painting coat.

"Yet I do wish, simply as a matter of satisfied curiosity, that I could find out what has put this idea about the girl into my head. Does it come from within or without? Is it a mild mania or a spiritual intuition? It is—oh, hang it! I'll take in the Elysian Roof Garden to-night, and come back to sanity."

So matters stood for two or three weeks

and, in the interval, the singular impression that the girl in the brown dress had made on Clifford did not weaken.

In spite of his efforts, he failed to establish a friendship with his neighbors, or, rather, to advance the acquaintanceship whose horizons never came closer than a bow on the stairs and a salutation on the street.

Many were the devices he used to break down the barriers of reserve which the girls had built around them, but all to no purpose. These devices were, however, of a legitimate nature, for Clifford's instinct as a gentleman debarred him from using aught else.

For example, he sent them a formal invitation to one of his receptions. It was, as formally, declined on the score of previous engagements. A civic procession was to pass the Lysandria. Clifford's windows commanded the street, while the windows of the other flat did not. So he sent a message to the Lysandria janitor to the effect that his flat was at the service of less fortunate tenants, but that he desired his neighbors to be included in the invitation.

Again a brief and conventional note of thanks and regrets.

Meantime, Clifford thought that he detected symptoms of trouble in the other home. The girl with the tired mouth began to look more tired than ever, and "his" girl was certainly paler and a trifle thinner than when he met her first.

The music at night became less and less and the cheery flood of chatter in the evenings had begun to diminish. Twice, and in the middle of the month, he ran across the man who collected the Lysandria rents calling at the girls' flat with a dissatisfied visage.

CHAPTER X.

A Woman's Voice.

THEN came the incident which established his fears. An old Southern mammy had been discovered by him and used as a model. Subsequently he discovered that she was a cook of a divine sort, so he made her mistress of his kitchen and overseer of his household, much to her delight and his satisfaction.

One evening he walked out to where she was transmuting chicken into brown-coated ambrosia, and he sketched her while she was

so engaged. The dumb-waiter door was open. On the other side of the shelf was another opening belonging to the other flat. Punctuated by the twinkle of plates, Clifford couldn't help hearing this as spoken by "his" girl and another:

"Mr. Gillespie says that he must have the balance of the rent by Saturday, Elaine. I met him on the stairs to-night. He was very unpleasant. What shall we do?"

"Well," came the voice of "his" girl, after a pause, "I still have my bracelet, dear, if the worst comes to the worst."

"That mustn't be," said the other, "you've already done more than your share for us all. Besides, if you do part with it, it will only put off the evil day."

"We won't say that. Let's say it will tide us over to the good day."

"That never seems to come."

"But it will if we wait long enough. On Saturday, Mr. Baring has promised to pay me something on account of my work. That will enable us to look the grocer and the laundress in the face again. I sold that little picture of the surf to Mr. Robinson, to-day, for three dollars, so that we sha'n't starve to-morrow, anyhow."

"Three dollars only? What a despicable shame for any man to offer you that figure for such a lovely thing."

"His" girl laughed cheerily. "Better than an empty ice-chest."

"True, but think what things will go into Robinson's ice-chest that really and truly belong to you."

Again the other's laugh rippled musically, as she said:

"Well, let's hope that he will have indigestion. But what about yourself?"

"Nothing very hopeful. The newspapers cut down expenses in the summer, you know. I may have a story in the *Planet* a week from Sunday; but I'm not sure. I have exactly four dollars and eighty cents to collect on Monday, Elaine. I wish I sold matches for a living."

Something like a sob followed.

"Never mind, May," said the other, "we'll pull through yet."

"I suppose so. But, oh! it's heartbreaking—this perpetual hoping against hope. This working for—"

"Now, May," said the other decisively, "I insist that you sit down, swallow this cup of tea and be good."

"Don't you think," suggested May, after a silence, "that Nellie and Ethel might—"

well, do a little more than they are doing for the sake of themselves if not for others."

"You must remember," said Elaine gently, "that Nellie's salary is very small and Ethel's allowance is only just enough to cover her studies and incidental expenses."

"Incidentals in her case include a host of things that you manage to do without, I notice."

"Well, what are luxuries to me may be necessities to her."

"You angel!" cried May impulsively, "always making excuses for others and sacrificing yourself. Why, Elaine, you've worn that heavy old brown dress of yours all this summer, just because—"

"I liked it."

"Fibber! Because you couldn't afford to buy another, which you certainly would have been able to do if you hadn't done more than your share for the flat, and—for me."

The speaker sobbed again.

"You are in danger of being put to bed," remarked Elaine severely.

"And—I—know that you had intended—going home for a—holiday and now—you—can't."

"Listen! you bad girl," replied the other, with mock anger, "and, listening, dry your tears and rejoice! A winning tale I would tell thee—at least, I hope it will be winning. I've struck a theme that is simply delicious. As sure as you're sitting there it's going to capture everybody, make me famous, all of us rich and—and—enable us to welcome Gillespie unabashed on the first of the month."

"Really?"

"Positively. The thing has simply taken possession of me. It will do the same to the public. And, May," the speaker's voice broke a trifle, "I think I shall be able to see mother this summer after all—if one-half of my hopes about it come true."

CHAPTER XI.

To Be Answered.

AT this juncture Clifford awoke to the fact that he was, to put it plainly, eaves-dropping. With a flush of self-contempt on his cheek, he beat a retreat to the dining-room, muttering things of an uncomplimentary nature about himself.

Later, when Mammy June came to clear the table, she found her chicken untouched

and her employer staring at the gleaming coffee-pot as if it were a "gazing crystal" wherein he was trying to learn his fate and future.

An hour passed, and from the flat next door came the thrill of music, followed by a series of disconnected, dropping, flute-like phrases.

It was as if a string of melody had broken and its silvern beads were falling in rhyth-mical confusion.

Presently the notes lapsed and died a death of lingering beauty.

Then came a resurrection of exquisite liquid tones, as of a flute played beside a forest brook. The harmony gained strength and shape, but lost none of its repressed tenderness.

Clifford, listening, felt himself back in Devon. The primroses loomed through the dusk, the fragrant copse lay before him, and the song of the nightingale with all its love and longing was touching the fibers of his heart.

The music haunted him all the next day. From out the wreaths of misty emotion it had evoked, there seemed to gradually shape an interpretation of his feeling for Elaine.

The love notes of the nightingale had caused something in his heart to vibrate in unison. The silent music of the girls had renewed the work of the "little brown bird."

Then a daring inspiration came to him—one of those inspirations that took immediate action. During the day he dropped in on Doure. Doure was a musician, who, had he cared, might have been much more than what he was, a partner of and the "arranger" for a well-known firm of music publishers. He put crude material into the crucible of his genius, and the result was music.

"Doure," said Clifford, "this is a confidential mission. I've a theme suggested by the song of the nightingale. Ever heard them?"

Doure had.

"Now, I want you to retain the melody but put your soul into the—the frills so to speak. I mean the introduction, the accompaniment, and the interludes."

Doure nodded. He was chary of words. Then he listened and jotted notes on a music score.

"When will it be finished?"

"In a hurry?"

"In a desperate hurry."

"To-morrow afternoon. No—evening."

"Good. Come round and dine with me and bring it with you."

Another nod and a grunt on the part of Doure, and Clifford departed.

Clifford had the knack of writing rimes when the humor seized him, and the humor was strong upon him now.

So he proceeded to fit words to the music that was insistently beating on his heart and brain. I forget most of the lines, but the final verse ran thus:

Oh, bird, Oh! unseen bird!

Who art by night and leafy curtains hid,
Whose throat and heart alike by love are stirred,

Whose song into my waiting life has slid!

Oh, bird with passionate trill,

Beneath the stars above,

Would not thy song with joy more fully thrill,

In the dear day of love?

Doure was punctual. Dinner ended, and the pair adjourned to Clifford's den, wherein was a piano. From the flat next door came the ripple of music. Doure opened the instrument.

"Want to try it over?" he asked.

The other nodded, but not without a curious tightening around his heart. Doure began to play.

Clifford was a fair musician as amateurs go and the owner of a good, robust barytone voice. The influences of the hour were strong upon him, and his voice waxed more tender with the advent of each line. Doure had done his part magnificently, and in the pauses Clifford, under the spell of the music, once more felt himself in the shadow of the Devonshire copse.

"Good," muttered Doure, as the song ended. "Want to try it again?"

Before Clifford could answer there came a hesitating ring at the bell of the private hall.

The artist answered it. There stood "his" girl. Her white cheeks told that she was laboring under distressful emotion.

"Mr. Clifford, I believe," she said with an effort.

"Yes. Won't you come in?"

"Thank you, no," said the girl, and he could see the fluttering in her throat.

"My housekeeper is here, and Mr. Doure, of whom you may have heard," remarked Clifford with gentle insistence.

"Mr. Doure, of Blank & Company?"

"Yes."

"Oh," said the girl doubtfully, "I met him once, but—"

"May I suggest that you renew his ac-

quaintance. He is a very dear friend of mine."

She hesitated for a moment, glanced at Clifford, and then stepped inside.

The man led the way to the parlor, and was in the act of summoning Doure when she stopped him.

"Before Mr. Doure comes here," she said haltingly, "will you permit me to ask you a question?"

"Certainly."

"I heard you—at least, I presume it was you—singing to-night."

Clifford could see the unshed tears in her eyes.

"Will you—can you—tell me where you got that song?"

Clifford was for the moment at a loss to answer. The situation had developed on such different lines from what he had anticipated. She misunderstood his silence, and went on eagerly:

"Pray do not think me impertinent. I write songs for a livelihood. I—thought I had—an original theme on which I was counting much."

She sighed deeply.

"But I have heard it—to-night—here. It must," she smiled, "have been unconscious cerebration on my part, I suppose."

Clifford groaned in spirit as he saw her distress. She was younger than he had anticipated—much younger. Something drew him to her queerly.

"Miss—"

"Aldyce."

"Miss Aldyce, will you permit me to reply to your question before I call Mr. Doure?"

"If you wish," she said, looking at him with mild astonishment.

"Then pardon me for a moment."

He left the room and returned presently with the roll of music and a manuscript.

"Before I apologize to you for the great liberty I have taken with you and yours, allow me to show you a copy of the words you heard me singing to-night. Please notice that the date that they bear is three days ago."

Still wondering, the girl looked and read, "The Nightingale. Words by George Clifford. Music by Elaine—"

"I did not know your full name then," explained the man quietly. The girl crimsoned, but answered not.

"This was done to-night," went on Clifford.

There was silence for a space, and then Elaine spoke.

"But what have you done—I cannot understand all this, Mr. Clifford," she said, in a perplexed voice.

"Will you, as a preliminary, assure me that if I make my motive clear, you will at least try to forgive me for those things?"

He indicated the music and the manuscript.

"I'm much indebted—" she began.

"Is it a bargain?"

"Of which I have unquestionably the best." She had recovered her spirits and looked radiant.

"Well, then, I was impertinent enough to think that a personal introduction to Doure might be of some service to you. And I knew it could be best brought about by this." He tapped the music.

"Then you overheard me playing?"

"I did—and I've an excellent memory for music when I want to remember."

"But the words are exactly those that I

wanted. How did you know my theme was the nightingale?"

"I have heard the birds, and you, too, I know."

"Yes."

"That shows the faithfulness of your treatment of the subject."

"But—Mr. Clifford, why all this trouble—this interest in—an—unknown?"

"Because—" He looked at her with eloquent eyes. "I thought you deserved it, and—Miss Aldyce—it was very hard to get an introduction to you by conventional methods. Now, I'll call Doure."

He started to go for his friend. Then he halted—looked at her steadfastly a moment, and said:

"Do tell me. Where did you hear the nightingale sing?"

"Where? Don't ask me, Mr. Clifford. It is too sad a story! I can't bear to think of it!"

"You must tell me!" he said. "You must tell me!"

(To be continued.)

FLANNIGAN'S REPORT.

BY W. C. DEUEL.

Written for "The Railroad Man's Magazine."

FLANNIGAN never ran an engine
That he would report "O. K.,"
There was always something broken,
Something that had gone astray.

He reported stack and head-light
The air, sander, and the bell,
And, according to his latest,
Neither injector worked too well.

His wedges were "down," to be set up,
His tank-brake traveled too far!
If they'd clean his rotary-valve,
He could stop without a jar.

She burned her fire next to the door,
Left a "bank" under the flues.
Her right main-rod needed a "liner."
Her driver-brake wanted "shoes."

Both her tank-hoses were leaking bad.
"Please test her gage and see,
If she is carrying 200;
She pops at 193!"

The foreman grabbed this last report
And scanned its width and length:
"Well, he orto write up prize-fights,
His dope sure has some strength!"

The more he read, the madder he grew,
His hair began to bristle;
And said, after he'd checked the items off,
"He don't report the whistle!"

"Does he think this shop is run for him?
Sure, I'll attend to his case."
"Mister Master Mechanic," he wrote
Across that report's face:

"Me force is small, I'm behind me work,
If you'll agree, by thunder!
I'll try and jack up this man's whistle!
And put a new engine under!"

THE RAILROAD WOMAN.

BY LYDIA M. DUNHAM O'NEIL.

Written for "The Railroad Man's Magazine."



HE'S a sittin' by the window, and her hands is folded tight;

She's a lookin' at the clock with anxious eye;

She's a waitin' for a whistle, watchin' for a headlight white,

An' a high-ball when the engine flashes by.

For there's some one that she loves—and he's out there in
the dark,

With the wind and rain a' howlin' all around;

And his body may be lyin' 'neath the engine, cold an' stark,

Or he may be speedin' safely homeward bound.

But the woman never tells him of the countless prayers she's said,

Of the long and lonely vigil that she's kept;

Never tells of her forebodings, of the many hours of dread—

Never tells how few the moments that she's slept.

For it's his to brave the dangers; an' it's hers to bear the rest—

Watchin', waitin', and sometimes just weepin', too,

For often there's a special—extra red-ball manifest—

An' it's Death that is the caller of the crew.

Who suffers most when there's a wreck?—the men that's in the mess,

Or the worried, white-faced women, miles away?

Them that's close enough to curse the worst an' laugh about the best,

Or the women, who can only wait an' pray?

Though the dawn will bring glad tidings, still the night has left a scar

On the woman's heart that time cannot efface;

You forget, but she remembers, just how close to death you are

Every moment, where the giant moguls race.

She's a sittin' by the window in a thousand homes, to-night;

She's a lookin' down the track with anxious eye;

She's a waitin' for a whistle, watchin' for a head-light white,

And a high-ball when the engine flashes by.

Fear is lurking in her heart, for it's Death patrols the track,

Where, through the stormy night, the engines pound;

And she prays to God to bring the man who loves her safely back—

To guide the mighty mogul, homeward bound.

The Sunny Side of the Track.

What the Busy Joke-Smiths of Our Esteemed Contemporaries Have Manufactured Lately to Force Our Laugh-Injectors to the High Point.

HER COME-BACK.

THE train was almost crowded, and the poor mother was gently tossing the baby up and down in her arms in a vain endeavor to stop its crying. As the car slowed down at the stopping place the conductor looked in the door and shouted:

"George's Cross!"

"Yes; and perhaps if you were cutting your teeth you'd be cross, too," the woman with the baby replied sharply.—*Tit-Bits*.

FOLLOWED HIS ADVICE.

THE president of one of the prominent railway corporations in America was making a stirring address to an audience of young men, and dwelt with particular emphasis on the necessity of making a good appearance.

"When you are looking for work," he said, "be careful that you are presentable. If you have only twenty-four dollars in the world, spend twenty dollars for a suit of clothes, three dollars and a half for a pair of shoes, fifty cents for a hair-cut and shave. Then walk up to the job, wherever it is, and ask for it like a man."

This advice was greeted with great applause, and the railway president sat down amid a storm of cheers.

The very next morning a dapper-looking young fellow walked into the outer office of the orator, and, handing a note to the clerk, said:

"Please give this to the president."

The note read as follows:

"I have paid twenty dollars for this suit of clothes, three dollars and a half for a pair of shoes, and fifty cents for a hair-cut and shave. I have walked from Harlem, and I would like a job as conductor on your line."

He got the job.

RYAN'S REPORT.

THE crew of a way-freight had discovered a cow on the right-of-way which they took to be dead, and the conductor had, by wire, so reported to the superintendent. The latter, anxious

to get the facts of the case, immediately wired as follows to the section foreman on whose territory the animal was seen:

"Pat Ryan, foreman, Section 24:

"Wire complete report on cow killed on right-of-way near MP 45, Sec. 24."

Pat got the wire all right and immediately started out to find the animal and investigate. He found her, and, after carefully viewing the "remains," sent one of his men back to the telegraph-office with his answer to the "super." The answer read:

"Mr. Blank, Superintendent:

"Cow killed by train wasn't killed by train. She died of eating raw buckwheat, but she ain't dead yet. If she dies before morning I'll bury her to-night. She was a good-looking cow, too."

"RYAN, Foreman Sec. 24."

—*Santa Fe Employees' Magazine*.

WHAT THEY CALL THE TIME-TABLE.

A TICKET-AGENT gives a list of the names by which people not familiar with the railroad time-table call for that folder: "A book showing how the depot runs in the daytime"; "a card showing when the railroad comes back"; "a diary of the trains"; "a railroad instruction book"; "a dictionary of the trains"; "a score-card"; "a catalogue"; "a program"; "a time book"; "a fare plan"; "a transfer card"; and various other names.

BLOCKED!

HE was traveling on a branch railroad in the North. After a series of sudden bumps and unexpected stops he became uneasy.

"Look here," he said to the porter, "is this train safe?"

"It sure am," said the porter.

"Well, have they a block system on this road?"

"Block system, sah? We hab de greatest block system in de world. Ten miles back we were blocked by a load of hay, six miles back we

were blocked by a mule, just now we were blocked by a cow, and I reckon when we get further souf we'll be blocked by an alligator. Block system, boss? Well, Ah should smile."—*Exchange*.

JUST LIKE A MAN!

THE train was about to depart when a stout old lady ran onto the platform.

The obliging guard at once pounced upon her, fairly lifted her into the carriage and, as he slammed the door, the train steamed out of the station.

The first stopping place was thirty miles up the line. When the train arrived there, the guard observed the old lady stepping out of the compartment in a state of boiling indignation.

"You nearly missed it, mum," he said.

"Missed it, you silly ass!" fumed the old lady. "I didn't want to come by it at all. I simply wanted to post a letter in the late-fee box on the train. And, now, perhaps, you'll tell me who is going to pay my fare back. Talk about the intelligence of man, I'd rather have a donkey to deal with!"—*Sheffield (Eng.) Telegraph*.

HIS WERE DIFFERENT.

PASSENGER-AGENT—Here are some post-card views along our line of railroad. Would you like them?

Patron—No, thank you, I rode over the line one day last week and have views of my own on it.—*Chicago News*.

WANTED EQUAL RIGHTS.

A MAN stepped up to the counter in the ticket office of the Colorado Midland Railway, the other afternoon, and said:

"What time can a man go to Glenwood?"

"At 7.30 o'clock to-night," replied the ticket-seller.

"Thanks," said the man.

At this point a woman, who had been standing back waiting her turn to ask questions, stepped up.

"Can a woman go at that time, too?" she asked seriously.—*Denver Post*.

FULL OF REAL CAUTION.

THE old lady and her daughter entered the depot. The old lady wasn't used to traveling and was very nervous. Her eyes wandered about the depot a moment, and then she walked nervously up to the station window, and tremblingly asked:

"When does the next train go to New York?"

"The next train, madam," said the agent, looking at his watch, "goes to New York at exactly 7.30."

"Will that be the first train?"

"Yes, madam, the first train."

"Isn't there any freights?"

"None."

"Isn't there a special?"

"No, no special."

"Now, if there was a special you would know it?"

"Certainly I would."

"And there isn't, ain't they?"

"No, madam, none."

"Well, I'm awful glad—awful glad," said the old lady. "Now, Maria, you and I can cross the track."—*Exchange*.

GRAFT.

THE directors of the road were a precious lot of grafters."

"You don't say so!"

"Yes, every last man of them had his appendix removed and charged the cost to operating expenses."—*Puck*.

MET HIS WATERLOO.

JIM FEALEY, transfer-agent, who has something of a reputation for quick and accurate replies to all queries, went down to defeat while checking No. 6, which had a large theatrical company from Denver to Chicago. The company disbanded at Joliet and each member had his own baggage to look after. One handsome young lady, on being told her transfer would cost fifty cents, replied, "Or a kiss?"

Jim mildly replied, "No, just fifty cents, please."

The lady smilingly came back with, "Well, after a second look, I guess you are right—fifty cents is the cheapest."

Jim silently retired amid the laughter of the whole car.

E. J. BETON,

Joliet, Illinois.

Ticket-Agent.

—*Santa Fe Employees' Magazine*.

THE RETORT COURTEOUS.

PRESIDENT TRUESDALE, of the Lackawanna, and President Underwood, of the Erie, were walking up Broad Street, New York, recently, when they met a good-looking colored girl to whom Mr. Truesdale bowed courteously. Mr. Underwood looked questioningly.

"Oh," said Mr. Truesdale, "thought you knew her. That's Phoebe Snow. She's been traveling on the Erie."—*New York Evening Mail*.

AN AMATEUR.

TED—I like to see a man who can forget an injury.

Ned—Well, that neighbor of mine should suit you. He's suing the railroad company for an injured leg, and every once in a while he forgets to limp.



THE BOES AND THE BABIES.

BY AUGUSTUS WITTFELD.

Loquacious Louie and His Fellow Wayfarer
Embark for a Day in an Infant Industry.



THAT job of near-work of Pete's, when he did the rescue act at the powder works," said Loquacious Louie, "puts me in mind of the time I was offered a job holding a kid for a small woman who was in a large hurry, and the mix-up my refusal of the job was responsible for.

"I was loafing outside of a railroad station one day, when a woman rushed up to me and asked me to hold her baby while she went inside and bought a ticket.

"Avaunt, madam!" I replied. "Do I look like the first vice-president of a foundling asylum? You are on the wrong wireless. My specialty is finance. If you want me to hold your purse while you take the kid inside and have it checked, I'm legible."

"She gave me the Exqumaw optic and rushed over to an easy-looking mark close by. I saw her say something to him, and he took the baby. Then she took a coin from her purse and, handing it to him, made for the ticket-office. I walked over and gave him the wayfarers' wink.

"What you going to do with the kid?" I asked.

"I'm going to adopt it and leave it all my money," he replied. "What d'you think I was going to do with it? Offer it for a prize in a guessing contest?"

"Well, if you did," I says, "I wouldn't want more than one guess, and that would be that your female lady-friend is trying to unload that baby on you. Didn't you ever hear of that old stunt of getting rid of a baby?"

"Sure, I have," he answered. "But you

don't think I'm going to turn down real money simply on account of an infant incubatus, do you?"

"Say," I asked, "what's the use of taking chances? If that female don't come to claim her kid, I see you doing the shap-pyrone act for life."

"Aw, shut up," he growled. "Do you want to wake this slumbering volcano?"

"I was on the point of making the retort cortuous when a porter deposited a trunk on the platform, as prescribed by the code, and the easy-looking mark started to earn his money. The kid emerged from slumberland and gave one of those shantycleer crows, but when it saw what was holding it, it started to yell like a Peek-a-boo Indian."

"Better tell it a fairy-story," I advised. "That may keep it quiet. Cinder Ella is a favorite with the kids."

"The easy-looking mark gave me a scornful look and started to walk the indigent infant up and down, trying to quiet it. I watched him hiking up and down the platform, and noticed that his interest in his job took him farther away on each succeeding lap."

"I was patting myself on the back be-

cause it wasn't me that was holding down that strenuous situation, when a fellow rushed up to me, and, before I could enter any objections, plumped a baby bunting into my arms and made a rush for the ticket-office."

"Hey, come back," I shouted. "Do I look like a depository for surplus infants?"

"That fellow evidently took you for a man of family," commented Pugilistic Patrick.

"Well, who said I wasn't?" demanded Louie. "I guess I've had as much family as most people. I've had the usual job-lot of fathers, mothers, grandfathers, and grandmothers, and so on. I'm like the blooming aristocrat—I'm long on ancestry but short on pro-jenny, and I'm the last of my line."

"Well, as I said, that fellow shanghaied that innocent infant on the largeness of my manly bosom and left me there feeling fussed and fearful. Supposing that kid took a notion to go into executive session like the one the easy-looking mark was holding, I saw my finish. I was trying to decide on a course of action in case my prize-package awoke from its suspended



"DO I LOOK LIKE A DEPOSITORY FOR SURPLUS INFANTS?"

animation, when that woman who had given the duplicate to the easy-looking mark rushed up and grabbed the kid out of my arms. She murmured something that sounded like thanks and mama's tootsie-wootsie, and rushed aboard the south-bound train which was about to pull out.

"I felt too relieved to be astonished. When the mistaken mother relieved me of that kid she also relieved me of a large chunk of anxiety. I looked around for the easy-looking mark and located him at the other end of the station. I made my way toward him as the train pulled out.

"When I reached him, his infant had quieted down and seemed to be treating him like an infinity. It had evidently made up its mind to accept him at face value and take its chances.

"Say," I chortled in triumph, 'what did I tell you?' She has went.'

"Oh, you're a profit, all right," he growled. 'Likewise you're an innishiate of the inner shrine of I-told-you-so's. If I had your power of preception, I'd hire out as a sight-seeing see-saw. What if she *has* went?'

"But she's got the wrong kid," I said, and then I told him about the hurrying Henry who had mistaken me for a truant officer, and how the unnatural mother had taken me for a bargain-counter, and depleted my stock of babies.

The easy-looking mark grinned.

"Here's where I unload on an unsuspecting public," he said. 'Keep your eye on your Uncle Dudley. What's the use of working when gray matter has the red corpuskels gasping for breath on the home-stretch?'

"He walked along the platform, carrying the kid innocently, while I stood there and wondered what kind of a game he was going to pull off.

"Pretty soon that buckaneer what had abandoned that infant to my tender mercies rushed up and grabbed the kid out of the easy-looking mark's arms, and, pushing a bill into his hand, hustled aboard a train that was about to pull out in the opposite direction from the one the woman had taken.

"Well, what do you think of that for head work?" asked the easy-looking mark, joining me.

"Great," I replied. 'While your brain is working, suppose you tell me where I come in on this. You've got all the emolu-

ments incruing from this deal, and as an equal partner in your iniquity, it seems to me that I should come in for a dividend.'

"Just you wait until a dividend is declared," he replied. 'There's only a dollar-fifty in the treasury, and that's not enough to declare a dividend on.'

"Say," I protested, 'you don't expect to get any more out of this mix-up, do you? I should think the incident was closed.'

"Closed?" he said. 'Well, I guess not. Take two fond, doting parents, each with the wrong infant on hand, and the situation is as full of possibilities as your head seems to be deficient in ideas.'

"How in the name of the infant industry do you expect to make anything more out of this mix-up?" I asked.

"As I said before," he replied, 'just you keep your eye on your Uncle Dudley and you'll learn a lot about high finance. If something don't happen in the money market pretty soon, I miss my guess.'

"There was no use arguing with that fellow, especially as he held all the trumps, so I shut up. We hung around that station for about half an hour, and then a train pulled in. About the first passenger to get off was that buckaneer who had acted as chief mixer in the mix-up. He still carried the kid in his arms, likewise a troubled look on his countenance. He made straight for me the minute he spotted me, and tried to place the kid in my arms.

"No, you don't," I said, dodging behind the easy-looking mark.

"That fellow tried to circulate around the easy-looking mark, who immediately got busy. He took the kid away from the frenzied father and made a bluff at examining it to see if it was all right.

"See here, you darned stiff," he said, 'what d'you mean by swiping that kid away from me that was given to me by a lady to hold? A fine mess you've got me into.'

"But what has become of the baby I gave to some one to hold?" asked the puzzled parent in troubled accents.

"I don't know anything about any baby you gave to any one to hold," answered the easy-looking mark. 'Who'd you give it to?'

"If I didn't give it to you," answered the puzzled parent, 'I gave it to some one who looks like you. Perhaps it was your friend,' he continued, looking at me.

"Say, do I look like that?" asked the easy-looking mark and me, pointing at one another.

"The maker of the motion refused to vote, so the easy-looking mark continued:

"I was standing here, this morning, when a lady asked me to hold her baby. While I was performing this trifling service to the best of my ability, you butted in and forcibly relieved me of the infant. When the lady found that some one had kidnaped her child she gave me all sorts for my seeming carelessness, and finally took possession of the infant you had thrust upon my friend here, claiming that you had brought the baby here to facilitate the execution of your scheme."

"Which way did she go?" asked the frenzied father.

"Say, look here," answered the easy-looking mark, kinder offended-like, "d'you take me for a blooming bureau of information or a sideboard of statistics? You've got me into a pretty mess with your bungling. Here, I've got to stand around with this kid and wait for the right owner to turn up. Who's going to pay me for my time and trouble, I'd like to know?"

The sucker fell for the bait, all right.

"If you can tell me where the woman went," he said, "I will give you five dollars, and in addition I'll take the child to her."

"Oh, I'll tell you where she went, all right," replied the easy-looking mark, "and I'll take your five dollars, all right, but when it comes to surrendering this infant to any one but its rightful owner, it's nix for you. The old guard may die on the job, but it never surrenders."

"Which way did she go?" asked the sucker, handing the easy-looking mark a five-dollar bill.

"She took a carriage," lied the easy-looking mark, "and she said she was going to hunt up the town burgess to see about getting a warrant for your arrest. No doubt you will find her at his place and be able to square things. Don't forget to tell her that I'm waiting here for her with an unredeemed package."

"That fellow swallowed the dope, all right, and started off. After he made his get-away the easy-looking mark handed me a dollar and told me to get two one-way tickets for Berwyn."

"What you want to go to Berwyn for?"

"Because," he replied, "that's where the lady what owns this kid went. She asked me to hold it while she went in and got a ticket to Berwyn. Go on and get the tickets."

"Say," I protested, "what you want to ride inside for? Has the possession of so much money at once affected your head?"

"I don't want to ride inside any more than you do," he replied, "but you can't ride on a brake-beam when you're handicapped with an infant of tender age."

"But what's the graft?" I asked.

"As I said several times before, and reiterate once more again," he replied, "keep your eye on your Uncle Dudley. Now hustle and get that transportation."

"Well, I got the tickets, and when the train pulled in we climbed aboard. I was glad to get into a good soft seat, for the pace that easy-looking mark had set was rather strenuous and seemed to affect my physical incapacity."

"There weren't many people on the train, consequently there wasn't much comment passed about our doing the beauty and the beast stunt, although the conductor did look at us pretty hard and asked us how we liked riding inside."

"When the train reached Berwyn we got off. The easy-looking mark went up to the station-agent and asked him if he knew the lady what owned the baby, had she gotten off of an earlier train, could he tell us where she lived, and could he spare a chew of tobacco?"

"The station-agent pleaded guilty to the first three counts, but ignored the last. He said he knew her, likewise she had got off of the 10.20, and lived in the house with the gray gables that was anchored on top of a hill about a mile away, which he pointed out."

"Also he told us that it looked like rain and that the crops needed it, and that the farmers thereabout were having a hard time raising enough crops to pay for their automobiles. When we were a half-mile up the pike, he was still talking with his face and both hands. He was a very voluble man, he was. I think that he kept on talking so's we couldn't get a chance to brace him for a hand-out."

"That easy-looking mark was a natural-born nurse-girl. That innocent infant treated him with perfect trust and behaved in a dignified, discreet way. We went tramping along that hot pike with peace in our hearts and money on our minds, and once, when the beauty of that pasture scene caused me to forget myself and offer to carry the kid, it was only the emphatically-voiced protest of the leather-lunged young-

ster that brought me back to the prosaic pike.

"When we got near the place, we saw the baby's mother sitting on the wide ver-

"What am I going to do with it?' she asked in surprise. 'What should I do with it, but keep it?'

"See here, madam,' said the easy-look-



"DO I LOOK
LIKE THAT?"

anda which ran around the house. She saw us coming with the infant and came to meet us.

"How good of you to bring him up,' she gurgled. 'I didn't discover my mistake until I was half-way home,' and she took the kid and started to talk infantly to it.

"Madam,' said the easy-looking mark, breaking in on her foolishness, 'the gent what owns that other baby is down at the other station making unparliamentary remarks about people what don't know their own children.'

"He is, is he?' says the lady, kinder fussed like. 'I'll give him a few points on parliamentary usage when I see him. I'll teach him how to care for infants.'

"But, lady,' persisted the easy-looking mark, 'what are you going to do with the other kid?'

ing mark gently but firmly, 'that other baby belongs to the gent what left the other baby with my friend here. He's back there, worrying his head off about it.'

"I am aware that it belongs to him,' answered the lady, 'but it also belongs to me. These two babies are twins. All babies look alike to my husband, so I am compelled to put some distinguishing mark on whichever baby he takes out so that he will be able to identify it.'

"This morning, when he started out to visit his mother, I called his attention to the fact that little Arthur, whom he was taking along, was trimmed up with blue baby-ribbon. When things got mixed up down at Palmar, and he found that he had a baby with pink baby-ribbon trimmings, he naturally jumped at the conclusion that he had somebody else's baby.'

"Then,' said the easy-looking mark,

with an ear-to-ear grin, 'both babies belong here.'

"Certainly," replied the lady. 'I wish you would tell my husband, when you return to Palmar, that I have both babies here, safely at home.'

our way to the station. We saw him first; consequently, he didn't have an opportunity to hold converse with us. We suddenly became interested in cross-country running, and never stopped until we struck the railroad.



"I DIDN'T DISCOVER MY MISTAKE UNTIL I WAS HALF-WAY HOME."

"Madam," said the easy-looking mark, 'I don't see how we're going to get back to Palmar. It took all the money we had to bring the baby up here. Besides, we've both lost a day away from our regular occupation. I think some one should make it good.'

"Well, he put it up to her with such candor that she couldn't very well repudiate the obligation. She insisted on giving him a five-dollar bill, which he accepted with seeming reluctance, and we bade her farewell, after promising to ship her husband home to her."

"Did you see the father of the twins again," asked Phonograph Pete.

"Yes," replied Loquacious Louie, "we saw him coming up the pike as we were on

"We hopped aboard the first freight that came along, and by night we were many miles from the land of easy living. The easy-looking mark called a meeting of the board of directors and declared a dividend of five dollars and fifty cents apiece.

"I gladly voted him a resolution of thanks, and we separated and went our various ways."

"Did you learn the name of that high financier?" asked Phonograph Pete.

"I asked him what he was called," replied Loquacious Louie, "and he said: 'Wherever I go, they call me blessed.' I guess he lied."

"Well," commented Pete, "I wouldn't say he lied, exactly, but I do think he used the wrong word."

A leaky engine is like a talkative woman,—It makes more noise than a good one and refuses to dry up.—The Wails of a Wiper.

The A. B. C. of Freight Rates.


BY JOHN C. THOMSON.

OF recent years we have heard a great deal of talk between the railroads, the shippers, and the Interstate Commerce Commission on the subject of freight rates. Few writers have given us any information on the subject that has not been such a wearisome maze of unfamiliar terms and expressions, that we might as well have read a Chinook's essay on cheese.

Almost every time we go into a store to buy something, particularly if we live in a city, we unwittingly pay freight charges to one railroad system or another, so that there is every reason why we should be interested in knowing how these charges come to differ so greatly from each other, and what it is that they go to pay for.

The problem of just and equal freight charges which Mr. Thomson explains is one of the most involved in the whole field of modern commerce, but he has approached it in such a simple, masterful manner, and has so carefully avoided confusing the reader with a lot of unintelligible stock expressions, that we believe he has succeeded in throwing a great deal of light on a subject that concerns us all, whether we are railroaders or not.

Some of the Difficulties of Apportioning Freight Charges That Worry a Railroad and Keep the Interstate Commerce Commission at Work Hearing the Protests of Shippers.

T is usually the case that an expert in any line—be it war, medicine, or freight rates—is the least capable of all men to explain his profession to the public. Words that to the expert are an every-day matter are to the outsider things of mystery; hence they are in the position of a Frenchman trying to explain the "Arabian Nights" in the original to a German, each speaking a different language, with no common meeting-ground whatever.

The best newspaper editor I ever knew used to employ a landsman, even one who could not swim, to report all cases of shipwreck, because he knew that most of his readers were landsmen, and could not understand the sailor-talk which a seaman would naturally use in his report. This is largely the reason for the fact that the rail-

roads have wasted millions of dollars in trying to educate the public concerning railroad freight rates, and that the public is still in darkness about what deeply and directly affects every pocketbook in the United States.

Freight Department Nomenclature.

In other words, as a general rule railroad men cannot write clearly about freight rates. The phrases, "water competition," "joint cost," "blanket rates," "class rates," are a part of the railroader's native tongue, as clear and commonplace as the words "cow," "ax," and "home"; and he uses these obscure terms in almost every sentence he writes or speaks about freight rates. But these technical terms are not understood by the public, and, in fact, are practically an

unknown language even to large shippers who spend hundreds of thousands of dollars every year for freight charges.

In this article I shall try to explain some of the factors that go to make up freight rates in the words of the man in the street, and shall try to discuss this complicated subject—one of the most complex known to the business world—in terms such as Smith uses to Jones, Smith being a butcher and Jones a doctor. If the expert railroad man feels inclined to smile at times over these lines, let him but open a medical book and read a few pages; then he will see why this article is not written in "railroad language," but in "United States," with which the non-railroader and the railroader not in the freight department is more familiar.

To begin at the beginning, it might be mentioned that "distribution" is a part of "production," not something different. When a man sends an article from New York to San Francisco, he does just the same thing as if he moved it from one side of his work-bench to another, so as to get it into a more convenient position, that he may work on it to better advantage. The difference is only one of degree—simply a changing of places.

What the Consumer Pays For.

Now, every business man—in fact, every consumer—is deeply interested in "the cost of production" we hear so much about, but few of them fully realize that the railroad freight rate is one of its most important items.

For example, suppose a man has a farm ten miles from the railroad in Kansas, and raises wheat. Wheat on the Kansas farm means bread, sooner or later, in New York City or in Seattle. He sends a certain amount of wheat to market, say to New York. The cost of pulling the load from the farm to the railroad by horses is about five dollars, the cost of pulling the wheat to New York City is about five dollars, and the cost of cartage through the streets of New York City is about two dollars.

This twelve dollars is a part of what the bread costs when served on a New York City dinner-table. Now, the average man will set up a roar if the farmer gets one dollar and ten cents for his wheat instead of one dollar; but he usually ignores an increase of ten cents in the freight rate, which amounts to the same thing to the final bread-

eater. The same thing applies to meat, clothing, shoes, hats, and, in fact, to everything used by human beings.

Therefore, the importance is seen, I hope, without further expansion here, of the railroad freight rate to every man, woman, and child in the United States. Nothing affects the price of real estate, the monthly rent, more than railroad rates. Cities have been made and ruined by changes of freight rates, and so have individuals by the tens of thousands, although, as a general rule, few of these knew what ruined them, or made their fortunes, as the case may be.

"Mileage" and "Joint Cost" Charges.

Now, what is a freight rate? It is the total charge made by a railroad, or a ship, or a canal-boat, or a horse-and-wagon freighter, for taking anything from one place to another. What the waiter is to the dining-room, the railroad is to the nation, the manufacturer in this case being the cook, while you and I sit at the tables and pay the bills. In this article we shall deal largely with railroad freight rates only, touching on canal, ship, and wagon rates only as they affect the railroad freight rate.

At first glance it looks simple enough, this matter of making just freight rates. "If it costs one dollar to haul one ton one mile, then it surely costs two dollars to haul one ton two miles, or two tons one mile," argues the average individual from a common-sense standpoint.

This is known as the "mileage basis," or charging for hauling goods according to the distance hauled. But soon we shall see that this apparently simple proposition is impossible in every-day practise. The "mileage basis" is the one the public are urging, while the railroads fight for the "joint-cost" system of charging for hauling.

A Multiplicity of Costs.

"Joint cost" is somewhat harder to make plain, and perhaps a simple illustration, known to every one, will help to make the matter clearer. When you go into a restaurant and order a twenty-five-cent meal, you get, let us suppose, the use of the room, table, knife, fork, and spoon, dishes, tablecloth, napkin, etc., free of apparent charge. At least nothing appears on the bill for these items; yet they must be paid for, and paid for by the eater of the meal.

The meal itself consists of soup, boiled beef, potatoes, bread and butter, coffee, and a piece of pie. The restaurant charges only for the meal, apparently; but it is clear to every one that the bill includes a charge for the other things just mentioned, such as the dishes, the rent, the lights, etc. Now, the bread and butter is also free, but there is an extra charge of five cents for another cup of coffee, and ten cents for an extra piece of pie.

This means that the restaurant-keeper makes nothing on the soup. He loses money on the bread and butter. He makes only three cents, gross, on the meat, and one cent, gross, on the potatoes, and four cents on the coffee, yet the whole meal yields him a final net profit of, say, two cents.

In other words, the restaurant man does not make an equal profit on each kind of food sold, but, in fact, actually loses money on some kinds that must be served, such as the bread, or the use of the table or the knife and fork, but makes up this loss on his coffee or pie. So, practically, he charges on each item just "what the traffic will bear," and by putting it all in together, turns out a cheaper meal to the eater than if he charged for each item separately.

A System That Averages Up.

In fact, it would be practically impossible to charge the man who stayed ten minutes and gulped down a cup of coffee and a piece of pie a just proportion of the rent and light bill, as compared with the family that spent two hours in the place and ate up half a turkey. So the restaurant man meets these "overhead charges," as they are called, by a more or less indefinite "joint-cost" system. He charges twenty-five cents for certain eatables as a whole, and out of them nets a profit of two cents.

To attempt to charge each man his exact proportion of the rent, the light, the laundry, and other bills, would be to try to put into operation the "mileage basis." In abstract theory, this last is the proper one, no doubt, but it cannot be put into practise. This is clear enough to every one in the case of the restaurant man, but it is not so clear in regard to the railroad man and his freight-rate charges, yet it is just as true.

The average man, we will say, ships a ton of wheat and a ton of coal from Kansas City to Denver. The railroad charges him, say, one dollar for hauling the coal and two

dollars for hauling the wheat, though they make the trip in the same car, and one takes no more space or makes any more trouble than the other. Here is where the average man sets up a howl, and insists—with much reason, at first sight—that if the railroad makes a fair profit on the coal for one dollar, it is robbing him on the wheat at two dollars.

Bunching the Charges.

But the fact is, that it is just as impossible in this case to figure out the exact charge of the railroad president's salary and the track-walker's monthly pay that the ton of coal should bear and that the ton of wheat should bear, as it is to figure out the same problem in the restaurant case just illustrated. The railroad must bunch the charges and get three dollars for the two tons—one of coal, and one of wheat—even though on the coal it makes only ten cents profit, and on the wheat twenty cents profit. In a rough way, this illustrates "joint cost" as the railroad man uses the term when talking of freight rates.

But now the plot thickens, as the dime-novelists say. In the preceding paragraph we have seen how the charge differs on two different articles when hauled the same distance in the same car. Now let us take another case, the very bone of contention in the present freight-rate situation that is attracting national attention. This is charging less for hauling the same article, perhaps in the same car, a long distance than for a short distance.

Take the case, for instance, of two tons of wheat, one going from Kansas City to Denver and another, in the same car, going on through Denver to San Francisco. When the car stops at Denver, the Denver man pays; let us say, two dollars, to cover the cost of hauling the wheat from Kansas City. The car door is locked and the car rolls away to San Francisco. The San Francisco man pays only one dollar to the railroad for moving his ton of wheat twice as far as the other fellow's, and the Denver man shouts till stones begin to jar loose from the top of Pike's Peak.

Where the Shipper Kicks.

"Rank injustice!" cries the Denver-man, and many agree with him, including, to some extent, the Interstate Commerce Commission.

But at the hearing the badgered railroad man shows the following conditions, and every one—the Denver man, and even the Interstate Commerce Commission—feel vaguely that they are up against a problem that is almost impossible to solve. Here is the case. The railroad man shows that if he charged, say, three dollars to haul that ton of wheat to San Francisco, the man in San Francisco would not ship at all, but would buy his wheat from South America, getting it by ship from around the Horn, the southern end of South America.

The Railroad's Justification.

Then the railroad would have only one ton of wheat to haul—the one to the Denver man—and would have to charge him three dollars for hauling it from Kansas City to Denver, instead of the two dollars it now gets. The railroad must be kept up, and a two-dollar income will not do it. It must have three dollars from some one or go out of business. So, by charging the San Francisco man one dollar a ton, it can afford to haul to Denver for two dollars.

But the Denver man says:

"You surely will not haul goods at a loss to San Francisco. If you make a profit, say, of ten cents on the one dollar charge to San Francisco, you should charge me, the Denver man, only fifty cents, and make a profit of five cents."

And the railroad man answers:

"It costs me two dollars and fifty cents to run the road, and ten cents to haul to Denver and twenty-five cents to haul to San Francisco, both hauls being from Kansas City. This is a total cost of two dollars and eighty-five cents for both hauls. I charge three dollars for the two hauls, and make fifteen cents profit.

"Now, if I cannot haul to San Francisco for one dollar, I cannot haul there at all; therefore, the Denver man would have to pay the cost of the road, two dollars and fifty cents, plus the cost of hauling to Denver, ten cents, or two dollars and sixty cents, plus a profit, even the five cents he mentions, a total charge to him of two dollars and sixty-five cents, or sixty-five cents more than he is paying now. Besides, there then would be no railroad from Denver to San Francisco, a very bad thing for the Denver man when he wants Japanese silk or Chinese floor-matting shipped to him from San Francisco."

To this the Denver man must agree, as there is no way out of it. But he comes back at the railroad from another point of the compass, thus:

"Your railroad is paying dividends of fifty per cent a year on the actual money invested. You are making too much money. You are getting more than your share. Charge one dollar to San Francisco if you must, but cut my charge to Denver down from two dollars to one dollar. In other words, to use a railroader's slang expression, reduce the 'hump' at Denver."

The Denver man is more or less right in this, at least the recent decisions of the United States Supreme Court and of the Interstate Commerce Commission seem to so indicate. As a matter of climax, it might be mentioned in passing, the Interstate Commerce Commission is mentioned after the Supreme Court, for the court follows to a large extent the fundamental principles gradually being worked out by the Interstate Commerce Commission. In past years the court has practically reversed its position on a number of vital questions pertaining to railroad freight rates, as national experience has educated the court as it has the Commission and the public.

An Unsolved Problem.

Freight rates, odd as it may seem at first thought, are almost a new item in commercial life, especially in America. No human brain, or no millions of human brains, can at once solve such a weighty problem. It is as vital, as deeply important, as is banking, with which the world has been experimenting for centuries and has not yet solved. But in banking, and in money affairs generally, we are much farther advanced in practical working knowledge than in the subject of freight rates.

If the United States were as smooth as a floor, with the same climate throughout the year in all parts of the country, with no snows in winter, no Rocky Mountains to cross, no big crops to haul in the fall, no other nations to send goods to our ports by ships, and no more people in New York City than in Reno, Nevada, then railroad freight rates would be a simple matter. The "mileage basis" would be the only thing to consider. But such things cannot be, hence the bewildered rate-maker resorts to "joint cost" to keep the railroad running and growing.

Now, because a system has abuses is no

reason for doing away entirely with that system. To set fire to the barn to kill the rats will kill the rats all right, but how about the barn, the live stock in winter, and the farmer? Because this joint-cost system has been, and no doubt is to-day, greatly abused in robbing the public through watered stocks in Wall Street, this is no reason for burning the "joint cost" barn just to kill these financial rats.

We, as a people, must pay freight charges according to either the "mileage basis" or the "joint-cost" system. At least we must use them till some one invents a new system now all undreamed of by man, and that seems a long way off.

In some cases the two seem to have been combined with more or less success. Thus, the freight-rate charges from the Atlantic seaboard to the Mississippi River, in the States north of the Ohio River, are a mixture to some extent of both the "mileage" and the "joint-cost" system. But more of this later. Enough to say here, that there are no mountains to cross in this section, no wide stretches of unpopulated country, and that traffic is regular enough to keep the cars full all the year round traveling in any direction, east and west, west and east, north and south, south and north—all things that deeply affect freight rates.

Now, to change the subject somewhat: The railroad man cannot talk two minutes about rates without using three terms that at once cause a blank expression on the face of his lay listener. Among these are "class rates," "commodity rates," and "flat" or "blanket rates."

An Explanation of Class Rates.

On the witness-stand the average rate-maker can toss and juggle these pet terms of his till the court-room goes round and round to the learned judge, and even to the questioning lawyer, while the man in the back seat reaches for his hat, tiptoes out into the hall, and takes refuge in a smoke. Forbid a railroad rate man using these three terms, and you might as well put a muzzle on him. He can't talk, that's all there is to it! Now, let us see what they mean, these three sacred terms.

First of all, I will give an example of "class rates." To ship a bass drum costs more per pound than to ship iron-ore. The drum takes more space in the car, and is more liable to get broken. It also was placed

on the train by hand, while the iron-ore is dumped by the car-load, and nothing except a blast furnace can change its value.

Bass drums, baby-carriages, and air-ships are more fragile, however, and such kind of things are roughly grouped into a "class." Carpets, gunny-sacks, canvas, etc., might be grouped into another "class." Crowbars, nails, chains, etc., into still another class, and so on.

These classes are constantly shifting more or less; that is, on some roads crowbars might be in Class III, and on another road in Class IV, but this is a minor matter. Enough to say that certain things more or less alike from a shipping standpoint are classed together, and the freight charges on all things in one class are equal.

"Commodity Rates."

Thus, if the railroad charges \$1 on crowbars it also charges \$1 on nails, and if the charge is \$5 on bass drums it is also \$5 on air-ships. This is what is meant by "class rates," and by the terms "first class," "second class," "double first class," etc., depending on the nature of the goods, the roads over which they go, etc. In practise these classes are much alike on all roads.

But as we have seen in the case of "joint cost," some goods will not move, as the railroad man so aptly expresses it, or, in other words, will not be shipped, if the charge is too high. Take the case of nails, for instance. We will say that both nails and crowbars are made in Chicago, and nails, but not crowbars, are made in Kansas City.

Now the railroad can charge \$1 for crowbars from Chicago to Omaha, but if it charges \$1 on nails, then another road will haul nails to Omaha from Kansas City for fifty cents, so no nails will move out of Chicago for Omaha. So the nails are taken out of their "class" and given a "special rate" of fifty cents.

This special rate is called a "commodity rate." The public knows what a "special rate" is, but for some reason the railroad man prefers to call it a "commodity rate," a term much less apt and clear than "special rate." However, the railroad man does make a "special rate" at times, something in regard to freight what excursion rates are to the passenger service. Now that we have seen what "class rates" and "commodity rates" are, we will take up "flat" or "blanket" rates.

New York, Boston, Philadelphia, and other near-by cities all want to ship goods to Denver, Colorado, for instance. Each city has some one claim over all the others. New York, for instance, has a large tonnage to ship, while Pittsburg is nearer, though it has a somewhat smaller amount of goods to transport.

Also the kind of goods vary greatly. Pittsburg ships iron and New York dresses, hats, and so on. So the railroad puts these cities all on an equal footing as to rates, and charges the same price for hauling the same kind of goods, say paint and varnish, from all the Atlantic coast cities to all the Colorado cities.

To do this is to make a "flat rate" to all the cities alike, or, in the picturesque language of the rail, to "lay a blanket over the coast cities and the Colorado common points." Here we meet a new term, "common points," that cuts a very deep figure in railroad freight matters.

"Blanket or Flat Rates."

A "common point" in freight-rates matters is much like the wholesale house in other business lines. Thus, because of its size and location, Denver, Colorado, can handle more business than can Fort Collins, Colorado, which is about seventy-five miles north and on but one railroad. Just as the man who buys a pound of beefsteak cannot expect to get the same low price as the man who buys a trainload of steers, so Fort Collins cannot expect to get as low a railroad rate as Denver.

But Pueblo, Colorado, on the other hand, one hundred and more miles to the south of Denver, has a large trade, and is the common business center for quite a number of small towns scattered around within one hundred miles or so. In other words, Denver, Pueblo, New York, Chicago, and other places, are "common points" not only in a railroad sense, but in many other business ways. In other words, all "common points" are under a "blanket" or "flat rate," when the freight charges from such points are equal.

Comparing roughly freight and passenger rates, we have in the passenger service the first and second class, the Pullman, the drawing-room, the special car, and even the special-train service. These in the freight end are "class rates." We have special or excursion rates in the passenger service,

which are "commodity rates" when applied to freight, and when tickets are the same price from New York and Boston to San Francisco and Seattle in the passenger service, we find the corresponding condition in the freight department called "blanket" or "flat" rates.

No Hair-Splitting.

Now, let no expert railroad man grin, grab his pen, and break into print over this rough-cut comparison, or over other equally rough-hewn illustrations in this article, any more than should a horseman if I had said that horses and cows were more or less alike in that each have long tails, are covered with hair, eat hay, give milk, etc., as compared to whales or eagles. The whole subject of freight-rates cannot be handled in detail in a few thousand words, especially in an elementary way, as I am trying to do here.

The fact that the cow has split hoofs and the horse has not, if applied to freight-rates in this article, would fill this magazine. Hence I omit much detail, that, while important in daily practise, would not alter, but rather tend to confuse, the subject for the average layman. This matter of confusion is the very mistake ninety-nine out of one hundred railroad writers make, and something I am trying, even at the cost of some exactness, to avoid here. Besides, the man who knows all about railroad freight-rates has not yet been born.

Just how many elements enter into the making of a freight-rate probably no man knows. I am sure I do not, and I have never met a man who did. One thing is sure, distance alone is one of the least important items, yet at first thought it might seem to be the most important thing of all. More important than mere distance, within reasonable limits, of course, are terminals.

The Part a Terminal Plays.

It costs less to haul freight from the city limits of Chicago to those of New York City than it does to move it through either city a relatively short distance. The reason for this is that terminals cost hundreds of millions of dollars. Those of the Pennsylvania and the New York Central in New York City, including the tunnels under the Hudson River, are an example of what terminals cost compared to the relatively cheap

construction between the two cities. In making a freight rate these terminal expenses must be considered, though they vary greatly with each city.

Chicago is so situated that it can have a belt line railroad running around the city connecting all the railroads that enter that city, while this arrangement is almost out of the question in New York City. This "belt line" permits easy switching of a car from one railroad to another, say from the Northwestern to the New York Central, but to switch the same car in New York City from the New York Central to the Pennsylvania costs much more. In the end the shipper, or rather the consumer, pays these bills, as he must and should.

Where the Small Towns Suffer.

When one considers the vast difference in physical conditions, conditions no man can change, that exists between the terminals in Chicago and in New York City, one cannot complain if the railroad charges \$1 for certain switching in Chicago and, say, \$5 for practically the same service in New York City. This same question of terminals is one of the roots at the bottom of the quarrel between big and little cities over difference in freight rates.

We will say that a man wants to ship two mowing-machines from Chicago; one to Denver and another to Littleton, Colorado, a small town about ten miles to the south of Denver, both machines going over the Santa Fe, which passes through Littleton. When the train reaches Littleton it must be stopped and delayed perhaps half an hour to properly switch out the car containing the mowing-machine, a delay which costs the railroad at least \$100, if not much more, counting interest on the money invested in the cars, engines, the crew's pay, etc.

In other words, the freight charge on that one mowing-machine does not pay five cents on the dollar that it costs the railroad to stop its long freight-train and deliver the machine at Littleton.

Hence in practise it pays better to take both mowing-machines straight through to Denver, break up the train, and, in a day or two, send one of the machines back ten miles to Littleton in a car loaded for Littleton. This car is so placed on a local train that it is quickly and cheaply cut out and dropped at Littleton without delaying thirty or forty other cars.

Now this seems to be the common-sense thing to do, but when the railroad comes to figure up its bill, then the trouble begins. Littleton is ten miles nearer Chicago than Denver, so according to some modes of reasoning—the abstract "mileage basis"—for instance—the charge to Littleton should be less than to Denver. If the charge were less, then the shipper would order the machine put off at Littleton but the rate to Littleton, via Denver, is made the same as to Denver and in some cases even cheaper than from Chicago to Littleton direct.

This tends, of course, to build up Denver as a business center at the expense of Littleton, and Littleton objects, giving many figures, some of which puzzle the wisest of heads. In case one place is much larger than another and better situated, there is usually little real foundation for putting the large and the small place on an equal basis; but if the two towns are nearly equal in prospects, though with yards maintained at only one of them, the other can show a pretty clear case of discrimination.

The famous "Spokane case," considered by the Interstate Commerce Commission a few years ago, was somewhat along these lines. In this case, Seattle was the Denver, and Spokane the Littleton, of the example we have quoted in the preceding paragraphs. The equally important "Reno case" is much on the same order.

Paying for the "Back Haul."

This condition of affairs is called "the back haul." That is, goods are pulled through a town to a big terminal, then back over the same tracks to the town and the local merchant is charged for the entire haul, the "direct," or "through haul," and the "back haul."

Take Spokane as a sample. Say the rate to Seattle from Chicago is \$1, and the rate from Seattle to Spokane, over the same tracks, is fifty cents. The charge from Chicago to Spokane is then \$1.50. Now it takes the disposition of a saint to stand on the platform and see your goods roll by to Seattle, then back to Spokane, and pay for hauling them all this useless distance, when they might just as well be put off at Spokane.

So the goods were put off at Spokane, but the bill is still \$1.50. In other words, the railroad has charged you for hauling the goods to Seattle and back, although it

has not hauled them one inch of this distance. Rank robbery again! But what are you going to do about it? "Pass a law?"

Just what kind of a law, please? The man who can properly word such a law will make himself famous, for before doing so he must solve one of the hardest problems in the actual operations of a railroad. In the case of Spokane and Seattle, the two places are each large enough to make them more or less equal, and the problem is tangled, but in the case of Littleton and Denver, as I have illustrated, the same principle appears in a much clearer manner.

If Spokane is to have certain rights equal to Seattle, then how about Littleton having the same rights as compared to Denver? But if Littleton has these equal rights, then how about the lack of great switch yards at Littleton? One cannot build many side-tracks and maintain a night-and-day signal service at every little jerk-water station, where the freight in some cases will not average one car a week.

Now here are some of the actual physical conditions under which a railroad operates, and how to adjust the bills to such conditions constitutes the whole problem of freight rates. Clearly the "mileage basis" will not do, and the "joint cost" system seems to be full of weak spots, while the combination of the two systems simply causes new problems to spring into life.

This brings us to the "zones," or certain sections of country under a "blanket rate," and a "blanket rate" you will remember is one where the charges from a collection of shipping points are the same, regardless of conditions. In the part of the United States where "the blankets" are most used, that is, from the Atlantic seaboard to the Mississippi River and north of the Ohio River, the territory is divided into different "zones."

For instance, say for the first hundred miles out of New York the charge is one dollar, for the first two hundred miles the charge is two dollars, etc., all the way to the Mississippi River.

Now it is easily seen that such a system of freight charges would divide the country into "zones," according to the distance from New York, Boston or any other Atlantic seaboard city. There would be the "two-dollar zone," for instance, and the "three-dollar zone" next to it. The charge to all cities in the two-dollar zone would be

two dollars, and the charge to all cities in the "three-dollar zone" would be three dollars, and so on.

All this looks very nice on paper, and even works fairly well in practise, but how about two cities near together, say twenty miles apart, one in the eastern part of the "three-dollar zone," and the other in the western edge of the "two-dollar-zone?" Here the two cities are only a short distance apart, yet the charge is one-half more to one than to another. This fifty per cent difference in freight rates from the Atlantic seaboard spells ruin for the city in the "three-dollar-zone," because the city so near it in the "two-dollar-zone" will, sooner or later, run it out of business, and reduce it to a comparatively dead town.

Now all this may seem merely abstract till you own real estate in that "three-dollar-zone" city, and your rent income drops steadily every year. This, in fact, is what is happening every day to thousands of real estate owners, and the problem to them becomes a very live and important one, indeed. Yet just how to adjust even this question so that things will be right all the way round we have not yet learned. Even the Supreme Court of the United States does not know and does not pretend to know.

The usual solution proposed by the three-dollar-town is to demand the two-dollar rate, regardless of the fact that then the town still farther west can, on the same principle, demand the same two-dollar-rate, and so on till the last, the "ten-dollar-zone," is reached. Of course this will not do, for then we would have a "flat" rate reaching clear across the continent, just like the postage-stamp system.

This very postage-stamp system has even been seriously proposed by some individuals as a possible solution of the freight-rate problem. Still it seems hardly right to charge a man as much for shipping from New York to Albany as it does from New York to Los Angeles. The Albany man would find fault, and give loud and long utterance to that universal cry, "our rate is too high."

I could go on for many pages giving one detail after another of the problems that confront the freight-rate man, and through him, the nation, for as I said in the beginning this question of freight rates touches swiftly and deeply every pocket in this country, though few persons realize it.

The second article on "The A. B. C. of Freight Rates" will appear in our next issue.

LAZY BILL BENTAK.

BY S. O. CONLEY.

Had He Not Been Such a Tight-Wad, the
King's Treasury Might Have Remained Intact.



HE king wore a crown made of an iron band studded with brilliants. The king's forehead was low, and avarice had set its seal upon his face. His nose shot out from his profile like a hook used by sailors when catching sharks. It was a nose of active mien, and seemed ever ready to smell out hidden money.

The ingenious limner who carved the portrait of that venerable ruler upon the everlasting granite that marks the entrance to the Province of Gowat, chiseled beneath it the statement that King Olfactus's name had been given to him because of the peculiar prominence of his olfactory organ.

The king was a miser, and ordered a stone-mason to build him a small pyramid—a sort of stone purse wherein he could lock up his untold wealth. In those days money was not loaned out at interest, and Wall Street was unheard of, happily for the simple-minded Egyptians.

So the king had the pyramid built, and during the long, weary winter nights he had his hoards quietly carted to his treasury. One morning at breakfast, while he was eating his oil-smeared fish and drinking his wine, the factotum reported that the deposit had been completed, and, lo! the key!

The king jumped from his seat at the table and cried: "My mare! My mare! The desert!"

The slave bowed his black head, and in a few moments the neigh of the caparisoned animal was heard at the gate.

The king mounted—he of the deep, copper-colored face, he of the nose—and, with the speed of the wind, he sped across the plain. A cloud of dust obscured the horizon marking his trail; but an instant after

the veil of the uplifted sand had been removed, no eye could discern the king, for he had entered his pyramid, and his mare was hitched in the shade at its base. He locked himself in, and began to gloat over his enormous and dazzling store.

Diamonds, rubies, charmed bracelets, antique rings, jewels worn by Noah, before and after the flood, together with his rich drugs, golden candlesticks, pearl-headed canes, images in gold and silver, crocodiles with emerald eyes, amber full of jet flies, silver lizards, and bronze serpents miraculously formed.

Ali Bentak, the humble stone-mason who built the pyramid, lay on the bed in the second floor, front, of his unpretentious dwelling on Salem thoroughfare, Egypt. His breath came feebly; he was almost ashen in pallor. The doctor who had been attending him for weeks shook his perfumed curls and waved an everlasting adieu.

The good old stone-mason was dying; a lingering illness was dragging him into the realms of "the mystic beyond." His widow-to-be leaned over his couch. She was a hard-working woman, and toil had given her a sad countenance. Her left eye squinted, and was tearful; her right eye was out, and, therefore, could do nothing.

Two youths stood beside the bed of the coming mummy. They were his sons; two idle boys who had done nothing to earn a living beyond holding horses and sweeping the streets of their native city. The stone-mason, having been the architect of the king's treasury, had nothing to leave his children save a secret and a blessing.

What he had put up, he philosophized, that also could he tear down; and as his bill for labor at one dollar and seventy-five cents a day had not been paid by the king,

he had no compunction of conscience. He beckoned to William C. Bentak, his eldest and laziest son, to draw near.

"I have a secret, Bill," said the mason; "and, before I die, I want to tell it to you.

"I built, you know, the pyramid for that avaricious old fossil, King Olfactus. He has his treasure in it, and goes there nightly to see it.

"When he leaves he locks the door and puts his seal upon it, so that any one getting in will have to break the wax, and the king will find him out. There are no windows in the pyramid, and, therefore, there is but one way of entering, and that is through the door."

Here old Ali Bentak gave a knowing look at his son, who winked away a tear and was all attention.

"Perhaps there is another way of getting into the strong box," he continued; "and perhaps there is a stone-mason who knows it. By the tail of the holy crocodile, there is! Four blocks up on the side fronting east there is a stone that turns on a pivot.

"The eye of the holy ibis might search in vain to find it, but it is there. Touch it where you see a rude and very small mark that looks as if it had been made by the slip of a chisel, and—you can get in. There is a corresponding mark on the inside, and by pressing that you can get out."

Finishing the thread of his discourse, he gave his bronze-colored soul to the protection of the holy crocodile and the holy ibis, and started for the domain of mummydom.

Old Ali Bentak had been sewn into his last shroud and placed in the front line of the long ranks of mummies in the catacombs, and his widow and sons looked around them and bethought of the pyramid. As it was the work of the late lamented head and guide of the family, they felt a natural pride in this monument to his genius.

Mrs. Ali Bentak was too proud to take in washing and too old to marry again, so she entered her right of dower to the secret, and suggested to her hopeful offsprings the excitement that would attend a midnight visit to the treasury department. During the day it was but natural that the sons of Ali Bentak should walk around the pyramid and admire the handiwork of the man who had built it; and while thus listlessly engaged they easily discovered the mark made by the chisel, and they took note of it.

That night the bureau of Mrs. Ali Ben-

tak sparkled with a few rare stones of nameless value, and the dining-room displayed a sumptuous supper.

Frequent were the incursions made into the hoards by those children of want; aye, so frequent and so incursive were they that the aged Olfactus was bewildered. His gods were leaving his heaven! Not singly, but in handfuls, his coins were winging their flight. His crocodile's eyes had been picked out, and his mythology was orbless. Even his coral eagle had lost its golden front teeth.

Where was this to end? Who was the evil spirit who was to finish it and him? In vain he searched with his hooked nose among his chests and boxes. In vain he examined every corner of his mine. No red gnome or spirit-bat was found tucked beneath a ruby or crouching in the shady side of a diamond. Amazement filled the king—despair, the miser. Twofold emotions took possession of the twofold man.

He had entered his treasury, and, as usual, the sacred seal of the kingdom was unbroken. He tapped on the walls; it was like striking a skull—a dead sound was the only answer. He appealed to the ibis, the bull, the crocodile, and all other sacred animals in Egypt's holy "zoo," that he had been robbed and robbed vilely; and the worst of it was he could not discover the robber.

Why not take all the treasure away and thwart the miscreant, he thought? Why not cast it far and wide over the Lybian sands that stretched southward and westward from his regal home? Why not give it to the cutpurses of the desert; build churches to the sacred birds and beasts; crown his queen with a diadem whose light would make her dusky beauty shine like a star over the dim mountains of the moon? But the old Shylock of the Nile left his great wealth in the dark vault, for its luster to shine on the somber walls and cheer the bandit in his foul success.

The king ate no supper that night, and, next morning, his breakfast left the table untouched. He mounted his trusty mare and flew around the sacred depository of his treasure. No bird had lit upon the apex of the edifice; no serpent coiling through the blazing sands had wriggled its way to cool its scaly skin in the dark shadows of the walls. The wind from the lone lands of Africa had hidden the footsteps of the mason's sons, and all was mystery and all

was dim. Those sisters of seclusion, Silence and Safety, reigned supreme.

A storm had gathered in the Afric air. The day had fled, and the night, the robber's friend, was abroad in the land. Loud howled the blast, and the mysterious Nile chafed against her reed-fringed banks. The monstrous deities of her flood found safety in their muddy shrine as they listened to the rattling thunder of the skies.

All was gloom and darkness, tempest and terror. And, in the midst of it, the brothers once more left their home for their Egyptian El Dorado. The stone turned on its pivot, and they entered. A torch was lighted and stuck into the ground. William C. Bentak and his brother picked their way in quest of the golden stores. William lifted from an open box a bracelet that was worth a battle between nations. His brother was staring in hypnotic admiration at the sparkling eyes of an ivory god.

"Hark! There is a voice at the door! The wax is being broken! Quick! Fly!"

It was the younger brother who spoke. Both started to escape. William was first out of the secret passage, and his brother was following; but the king was too fast. He had entered just in time to see a body fall to the floor.

The gleam of a sword, and the deed was done. William C. Bentak severed his brother's head from its body, and the secret opening snapped closed. He seized the gory head and fled from the pyramid into the sheltering seclusion of the stormy night.

He gloried in his freedom, and in the fact that he was outside of his brother's tomb. With his brother's head in his hand, he reveled in knowing that he had left the king inside with the lifeless trunk, and William C. Bentak ran on and on.

The king thought that he had made a gallant capture; but the lifeless, headless body before him only added to his misery and chagrin. He looked around and wondered whether he was in a dream, or whether the inmates of the sacred "zoo" had given him into the hands of conjurers. Then it dawned upon him that he had no time to waste in thinking, if he wanted to catch the culprit.

He dragged the body out through the door and onto the wet sands. He reentered, extinguished the torch, locked the pyramid, and hastened back to his palace. His private guard was commanded to fetch the headless body from the pyramid; and then

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the worried, fretted, frightened, puzzled king began to lay his plans for the morrow. Wrapped in his dressing-gown and his thoughts, he drew a chair before the fire and, in it, fell asleep.

William C. Bentak had cut off his brother's head to save his own. He believed that the force of this argument would acquit him of premeditated murder. Had both been detected, he soliloquized, both would have been destroyed; and, to prevent the secret being discovered, he had removed the only evidence against himself—his brother's speechless head.

The next morning the king was busy issuing an edict. That edict commanded that every inhabitant, from the oldest to the youngest, of his city and the neighborhood within a radius of one hundred miles, should pass before a gibbet on which was to be exposed the body of the unfortunate thief.

Soldiers were placed near the gibbet whose duty it was to scrutinize the face of every person who passed, to see if they could trace any expression of recognition. By ten o'clock the public square was crowded with the dusky people. They passed on, wondering, but not recognizing. None knew the mason's son.

In Egypt, in those days, death was looked upon as a peculiar institution of nature, and great care was paid to the bodies of the departed. Without burial they could not pass that glorious gulf which separates mortality from immortality. An unattended mummy was no mummy at all, and was excluded from that paradise where the highest enjoyment is a full and social intercourse with the crocodile, the ibis, and the bull.

"You must bury your brother," said Mrs. Ali Bentak to Bill.

"How can I?" asked the son.

"You must bury your brother," repeated Mrs. Bentak, with seemingly unnecessary vehemence. "And," she added, "if you do not, I will tell old Olfactus all about it."

William Bentak left the room, and proceeded to saddle his mother's mule. In the panniers of the impervious leather he poured wine; in the wine he poured a poisonous opiate; in the saddle he deposited his person, and made his way toward the public place. The sun was setting. Tower and dome and steeple glowed in its ruddy splendor; and afar, over the sands, the wind began its mourning wail; but onward, in the deepening twilight, jogged the fratricide.

The people had obeyed, in awe and silence, the dread mandate of the law, and had returned to their homes to talk over the wonders of the affair. The guard, with their white shawls folded over their heads, and armed with spears and heavy stone hammers, were grouped about the base of the gibbet. They were tired with the weary and useless ordeal.

William Bentak dismounted from his mule and carelessly approached the group. He was the only civilian among the soldiery. It was but an instant's work to prick a hole in one of the panniers and let the wine flow out. Speedily it was observed by the tired guardsmen. They rushed to the wine sacks—they filled the hollow of their hands—they pressed their mouths to the aperture—they laughed at the rider's well-affected grief. And what was it to them whose wine it was so long as they could drink it!

The wine was not tardy in its potent effect. Through the brain, through the marrow of the bones, through the arteries of the heart, it flew like molten quicksilver, and, worse than the arrows of the sand-enveloped Bedouin, it killed the life within them; and, one and all, the captain and his men were stretched upon the ground. Then, with all the dead about him in the thick gloom of the evening, William C. Bentak tore his brother's body from the gibbet and fled to the safety of his mother's house.

Poor old Olfactus. His eyes turned so red from weeping, his famous nose so blue from constant blowing, and his step so tottering that many thought he had begun a life of dissipation. His treasury invaded, his guards murdered, the body rescued, the culprit fled, and, worse than all, the secret of the mysterious entrance to the pyramid unraveled!

He could not understand why the crocodile, the ibis, and the bull had been so unkind to him. He had acted like a king, he had been open and aboveboard, and there was no guile in any of his commands. Why not change it all? Ha! Ha! He would be tricky, and he would beguile. He would show the populace that in his old bald head there were a few ideas worth knowing. So he feigned wonder and admiration for the cleverness of the mysteries, and published a brief exposition of his royal views and intentions, in which he said:

Be it known that I, King Olfactus, under the blessing of the great water-god of the

Nile, the crocodile, and his brethren in holiness, the ibis and the bull, am willing to pardon the wonderful man who has robbed my coffers, killed part of my brave and victorious army, and robbed the gallows of its fruit.

Not only do I pardon him, but I invite him to come forward on the fourth day of the next moon and stand before my daughter, the beautiful Princess Sophina, who will be present on that day, beneath the palms in the Golden Hall of the Whispers, in my palace of the Silver Peach. And if he will recount to her, and prove that he is the person who performed the aforesaid wonders, he shall have the hand of my daughter in marriage for his astounding and wonderful acts.

This was signed in the name of the crocodile, and posted in the public square. It had a wonderful effect.

The Princess Sophina was beautiful among women—lovely, but not whiter than the lotus of the Nile—and heiress to the large estates of the monarch. Day by day the princes and peasants filed into the Hall of Whispers to tell their gruesome, concocted tales. Hope had inspired them with wit, and their tongues were eloquent, but none could account for the mystery of the pyramid.

The princess sat in patience. Flowers of infinite size and hue exhaled their loaded sweets on the air of the capacious hall; wondrous birds fluttered from branch to branch in the evergreen palm-trees of this wilderness of shrubbery; and, chained by a golden link, a huge crocodile spread his flabby feet in a tub of marble inlaid with gold and precious stones, sighing occasionally for a freer bath in his beloved and native Nile. Music, ever and anon, floated upon the incensed air from unseen instruments, filling the place with melody and voluptuous languor.

Sophina listened to the recital of the gallants of her father's court and the peasants of the highways, amid this scene of inspiration, but none could win a smile of credulity from her roseate lips. Like the image of Silence and Thought, the Sphynx of the Sand, she heard, but she answered not.

—Olfactus was all on fire. He wandered about his palace, and he visited his pyramid; but only broke its sacred seal to find some other treasure gone—more money lost. By the yellow snakes of Egypt! what was to be done?

A figure wrapped in a flowing robe stood before the princess. Two dark and glaring

eyes gazed upon her beauty; two eyes that seemed endowed with the expression of inextinguishable suspicion flashed into her soul.

Those eyes read her heart, read her brain, read her diplomacy. For one instant they wandered toward the shrubbery, and a smile played from the mouth to the eyebrow of the mantle-covered stranger. The princess was seated in a regal chair; the visitor stood directly in front of her. They were alone, for he had waited until all had departed, baffled and disappointed.

"Speak," said the princess, impatient at his silence.

"I know all, and did all!" replied the stranger.

"Ah! Then tell me."

She listened to the slow and deliberate narrative, wondering how so simple a thing could have baffled the wisdom of her father. The narrator had just finished, when she, too anxious to obey the secret orders of the king, hurried forth her hand to seize him, her fair mouth opening to call the guards hidden behind the convenient shrubbery. He, too, extended his willing and unsuspecting hand to receive hers. She seized it with a cry of joy—and William C. Bentak fled.

He fled the palace, he fled the court, he threw his coat aside, he showed both his hands as he crossed the street. He sought his mother's humble house, and again was safe.

The princess gazed on her suitor's hand.

She looked at its withered flesh, its shrunk arm, its almost rotting bones. The guards gathered around her. They gazed in wonder at the new demonstration from the land of mysticism. They pursued not the demon that had just fled upon his wings of gloom. The king tottered into the chamber and demanded the person, who was to be given over to torture.

"That hand! That arm!" cried the king.

"Is his—the fiend's!" exclaimed the daughter; and the skeleton arm fell from her grasp to the floor. William C. Bentak had had the right arm of his brother concealed under his cloak.

"In vain! In vain! Oh, crocodile! Oh, ibis! Oh, bull!" cried the thwarted king. "Witchcraft and priest-jugglery are against me! By the dome of the eternal catacombs, let me die! let me die! Oh, crocodile, take me to thy home! Oh, ibis, take me to thy dominion! Oh, bull—"

The king fell in a swoon.

Two nights afterward he visited his pyramid. More and more of his jewels had gone. The third night, as he was approaching the treasury, a pale green light effused from the secret entrance. Quietly he entered the pyramid by that aperture, and caught William C. Bentak in the act of locking a chest.

On the following day his majesty's head was mysteriously placed on the gibbet in the public square. Beneath it was a card bearing this inscription: "He robbed his own treasury."

AN INTERURBAN SLEEPER.

A SLEEPING-CAR on an interurban line is not an entirely new thing in this country, but such cars as are now being operated daily between Peoria, Illinois, and St. Louis, Missouri, are proving a boon to the traveler as well as something of a curiosity.

Upon entering a compartment to prepare for the night's rest, one finds that the bed to be occupied is folded snugly into the wall and that a chair, placed in a comfortable space, is waiting for the passenger.

If the upper berth is not sold it is not let down, which permits of standing upright if desired. When ready to retire the cot is drawn out from the wall, and if tall, you will find to your great relief that it is six inches longer than any berth you have ever occupied, and permits of stretching out to full length.

In the wall at the head of the bed is an electric light, which obtains its current from a storage

battery and not from the trolley. With this arrangement the light burns with the same uniformity at all times, and makes it possible for one to read after retiring if wishing to do so.

A small wall safe is also provided in each compartment, for the protection of money or other valuables. This in itself is a unique and a valuable addition to the sleeping-car. Upon arising in the morning the cot is again folded into the wall, and the small camp-chair is again used while dressing.

The toilet-rooms at each end of the car are roomy and well equipped, and after the preparations for the day are over you return to your berth, when the thoughtfulness of the company surprises one still more, for you are served by a porter with hot coffee and rolls with butter, free of charge. We are told that he is amply paid, and the company does not permit him to accept any tips.—*Scientific American*.

Holding Up the "Cannon Ball."

BY SAM HENRY.

THE TRUE STORY SERIES. To think coolly and act quickly while looking down the barrel of a revolver in the hands of a desperate outlaw, requires a nerve one seldom meets in the day's run. With the long list of railroaders who have been killed by train-robbers in mind, the engineer who keeps his mouth shut and does as he is told under such circumstances can justly feel that he has done all that could be expected of him. Engineer Converse did not believe in carrying firearms. He did his part and did it well, pitting his wits against the train-robbers' pistols and winning a fight which might never have been won with bullets.

TRUE STORY, NUMBER FIFTY-TWO.

A Train Robbery That Missed Fire and Ended in a Bloodless Victory for the Train Crew Through the Quick Wits of a Plucky Throttle-Handler.



"COLONEL, your soldier comrade certainly displayed wonderful presence of mind. Your story about him reminds me of an incident, in my railroad experience, in which the main actor was also a soldier, having taken part in our family row of the early sixties, though at the time of the exhibition of courage and presence of mind of which I shall tell you, he was an engineer on a train called the 'Cannon Ball,' which the Gould system, in the early eighties, was running, solid, from Galveston, Texas, to St. Louis, Missouri.

"I was sorting mail on this train for 'Uncle Samuel' between Houston and Tex-

arkana. Leaving Houston at 5 P. M., we arrived at Texarkana at 9 A. M., making the three hundred and sixty-five miles in sixteen hours. Stopping only at county seats and junctions, this train was the fastest in Texas, at that time.

"Well I remember the engine-boys who had the honor of pulling us! One of them was William Converse. He won the respect of all his fellow railroad men, as he used the choicest language, was always retiring, and never given to swagger. If you saw him arriving from his run, his overalls would still be neat, and the tips of his white collar always showed above a well-fitting jumper.

EDITOR'S NOTE: All the stories published in this TRUE STORY SERIES have been carefully verified by application to officers or employees of the roads or companies concerned who are in a position to be acquainted with the facts. Contributors should give us the names of responsible persons to whom we may apply for such verification, in order that fruitless inquiries may be avoided. This condition does not imply any lack of confidence in the veracity of our contributors, but is imposed merely to give greater weight and authenticity to the stories.

Series began in the October, 1906, Railroad Man's Magazine. Single copies, 10 cents.

"Pulling the throttle of engines since 1866, and an engineer on the I. and G. N., between Longview and Galveston, since 1875, he is, to-day, pulling No. 5 and No. 6 between Longview and Palestine, still making schedule time on these fast trains.

"But now to our story of the part this man played in an attempted train-robbery which occurred the latter part of September, 1885.

"Ours was a fast through train, and we were always believed to have lots of money aboard, particularly in the fall or cotton season, when the banks of Houston and Galveston shipped currency daily to the country banks to move the cotton crop. The government must have realized that we ran some risk in consequence, because they supplied us mail clerks with old army pistols, as long as your arm, with the warning, however, that if they disappeared we should have them to pay for.

Didn't Tote a Gun.

"Mr. Converse was in my car at Houston one day, getting a drink of water, while I happened to be hiding my old army blunderbuss under some sacks, and, seeing what I was doing, he remarked that I evidently did not intend to use it if held up. 'No, sir,' I replied. 'It is my opinion that when men get sufficiently desperate to hold up a train they value human life very little, and I am not going to do anything that will give them an excuse to use me as a target.'

"He said that he, also, looked at the matter as I did, and therefore never carried a gun on his engine.

"At our first station out, Spring, twenty-three miles from Houston, where we had exchanged these remarks, I heard the porter, on the opposite side from the station, shouting at some tramp, as I thought, to get off. Then I heard him say, 'All right, boss,' and I looked out to see him trotting along ahead of a man with a pistol in his hand.

"The train was moving off very slowly, and they had no trouble climbing aboard the front end of my car. Then two more fellows came from behind lumber-piles alongside of the track, and boarded the engine, with pistols in their hands, which they pointed at the engineer and fireman.

"They ordered them to pull down to the San Jacinto River bridge, five miles away, and stop with all the coaches on

the bridge except the mail and baggage cars. Five of their pals, they said, were waiting there, who, if tricked, would kill Mr. Converse, should it take twenty years to do so.

Too Much for the Fireman.

"After we got under good headway, the fellow who had the porter in tow on the end of my car, knocked him on the head and pushed him off. He then started to climb up over the tender to join his pals in the cab, but coming over the tank he slipped, and fell headlong into the gangway of the engine, accidentally discharging his pistol. The fireman, covered by another one of the robbers, who had been trying to frighten him by sticking his gun into his face and telling him he didn't care whether it went off or not, had been pressing up into the cab window, and was now so startled that he went out backwards.

"Mr. Converse was also badly startled. He jammed on the air, almost stopping the train, but the man covering him shoved his pistol along his ear and commanded him to go ahead. Mr. Converse asked if the fireman had been killed, and was informed that he had caught the last sleeper.

"'I am sorry, for your sake, if that's the case,' said Mr. Converse, 'because, you know, captain, the State penitentiaries are both on this road, Huntsville being only a short distance away, and the convict guards are constantly traveling back and forth.'

The Train Was a Fort.

"They carried a hundred or more convicts to the State farm, near Houston, yesterday, to pick cotton, and I saw eight of these guards, returning to-day, get on our train at Houston. All had shotguns and side-arms, and if that fireman caught the train, as you say he did, the mail and baggage cars are regular arsenals by this time, and some one will certainly be killed if you attempt to carry this job through.'

"The robber lost his nerve, pleaded with him to save them, and threatened that if they were hurt his pals would, sooner or later, kill Converse.

"'Captain, I have a plan,' said the engineer. 'I will stop the train on the bridge, allowing only the pilot to reach the bank. You can then shout to your comrades in the brush to run for their lives,

and then join them by climbing out over the running-board and going down the track, keeping the engine between you and the train, so that the guards cannot get a shot at you.'

"This plan evidently met with the robbers' approval, for, arriving at the bridge, their leader called to his pals in the brush to run—that the train was a veritable fort.

"They then took off down the track at a speed which would have done credit to a Texas bronco, firing back at the engine to intimidate Mr. Converse, so that he should not pull up and allow the guards to give chase.

"The truth of the matter is this: with the exception of the messenger's old sawed-off, my army pistol, and a .32 belonging to

a passenger, there wasn't a thing on the train that could have made powder smoke.

"And the best of it is, that we never learned the story of how the robbers were frightened away from Mr. Converse at all. We got it from one of the robbers—from the leader himself, in fact—who was captured about five years later, after doing a similar job farther west. In giving an account of the hold-up, he said that he had since learned how he had been tricked, but that Mr. Converse's story was so logical and coolly told that, at the time, he had not doubted a word.

"If you knew Mr. Converse as I do, you would agree with the robber, who said of him: 'That engineer was the nerviest fellow I ever saw!'"

BALLOON-POWER RAILROAD.

A RAILROAD on which the motive power is supplied by a balloon, is certainly a novelty. Such a railroad has been constructed in Austria under government supervision. Its object is to carry passengers up and down Hochstaufen Mountain at Bad Reichenhall.

The top of this mountain affords a splendid view; but the climb to the summit is tedious and uninteresting. Accordingly, it was decided that the tourists who visit the place would appreciate the labors of the captive balloon devised to convey them to the summit.

The balloon was made to run along a track built at the side of the road-bed. A trailer with many wheels clasps this wooden rail, or track, and the passenger-car is fastened to the trailer.

The operator sits in the car, with a cord swinging between him and the balloon by which he can

regulate the supply of gas. Safety devices are at hand in case of accident.

Before the car starts up the mountain the balloon is charged with sufficient gas to enable it to ascend to the summit, and when the top is reached and all is ready for the return journey, some of the gas is permitted to escape, whereupon the car starts down hill, its speed being checked by the retarding effect of the gas still left in the balloon.

It was not until the most rigorous investigations had been made and the comparative safety of this method of journeying demonstrated, that permission was given to build the railroad. There are many novel safety devices to prevent accident.

The tank and generator from which the gas is drawn answer the double purpose of supplying power for the railway and furnishing gas for illuminating the town.—*Chicago Record-Herald.*

PIGEON ACTS AS PILOT.

A BLUE pigeon with a peculiar fondness for railroading, for several months past has been flying with the Iron Mountain trains between Walco and Gurdon, Arkansas, a distance of thirty-four miles. The bird is known as the "Royal Blue Flier," and it generally keeps just ahead of the engine on a level with the headlight, stopping to rest when a station is reached.

For a long time the pigeon was regarded as a bird of mystery, for its origin was unknown, and it eluded all attempts to capture it. Not long ago, however, it was finally made a prisoner by Special Agent J. M. Lambert while it was perched on the headlight of engine 28, which had stopped at Witherspoon. He succeeded in getting up to the front of the locomotive, and, reaching around the smokestack, grabbed the bird.

Lambert shortly afterward discovered that its

owner was J. W. Hall, a resident of Malvern, who took the pigeon home with him, but lets it loose that it may make its trips with the train.

On one trip, Engineer Golleher, who was in the cab, tried to overtake it, but it was no use—the pigeon always stayed just ahead. When the train stopped at Arkadelphia for water, the bird flew out to one side and rested in a tree until the fireman rang his bell for the start, when it resumed its place just in front of the headlight, flying at a suitable speed to remain about the same distance ahead, whether the train was going slow or fast.

Some of the trainmen are said to regard it as a hoodoo, and fear that its presence portends some disaster to them, but as yet no accident has happened to a crew while the bird was along. Others look upon the pigeon as a pet, and are always glad to have it join them on a trip.

HERREN'S FINGERS CLOSED UPON THE
MAN'S THROAT.



Ten Thousand Miles by Rail.

BY GILSON WILLETS,
Special Traveling Correspondent of "The Railroad Man's Magazine."

No. 8.—STORIES OF THE ST. LOUIS UNION STATION.

The Con, the Burglar, and the Actor—The Peace-Making of Tom Mooney—
"Lucky" Herren and His Quarry—The Millions for Which
Charlie Gilpin Is Still Waiting.

PULLMAN CONDUCTOR FROMEYER was sitting in section 10, car 3, outside of stateroom A. This stateroom was occupied by a passenger whom Conductor Fromeyer at first regarded as exclusive, then as mysterious. All the way down from Chicago this passenger had kept his door locked, having opened it only once an inch or so to hand out his ticket, just after the train had left the Windy City.

Whenever the train stopped at a station

Fromeyer noted that the window curtains of stateroom A were drawn tight, notwithstanding the fact that it was on the shady side of the car.

It was a Chicago and Alton train. Toward sunset it was within an hour of St. Louis. Conductor Fromeyer was thinking about the occupant of stateroom A.

There were seven or eight passengers in the car. In section 9, opposite the one in which Fromeyer was taking his ease, sat a young man, fashionably dressed. Fromeyer watched the young man intently as

Series began in June Railroad Man's Magazine. Single copies, 10 cents.

he took a suit-case from under his seat, opened it, rummaged among its contents, and finally took out a clean handkerchief.

The young man then closed the suit-case and put it back under his seat. Meantime, Fromeyer noticed that the stenciled initials on the suit-case were "J. J. W."

"Guess I'll go to the diner and get a bite while we run into St. Louis," said J. J. W. to Conductor Fromeyer. "I open there to-night—and I'll save time by eating now."

"One of the profession?" asked Fromeyer.

"Yes. We're playing at the Olympic Theater." He hastened forward to the diner.

No sooner had the actor left the car than something happened that greatly excited Fromeyer's curiosity. The door of stateroom A opened and the mysterious passenger stepped out, carrying a suit-case. He went directly to section 9, just vacated by the actor, and sat down, placing his suit-case on the seat in front of him.

Not a Regular Occupant.

The man was unshaved, his hair unkempt, his clothes slouchy—not at all the sort of person who usually occupied expensive stateroom A.

Looking across at the Pullman conductor, the man threw open his coat, revealing a badge.

"I'm Captain McNaughton, chief of police of Hot Springs, Arkansas," he said to Fromeyer. "So kindly pay no attention to what I am about to do. I'm after a certain man. You must neither see nor hear."

The man with the badge pulled from under the seat the suit-case marked "J. J. W." He opened it, took out a bath-robe, bath-slippers, two shirts, a bag of collars, and a tin box labeled "make-up." Then he opened his own suit-case and dumped its contents in their entirety into the bag marked "J. J. W.," which he then restored to its place under the seat. Next, he placed in his own bag all the things he had removed from the actor's suit-case, closed it, arose and carried it back to his stateroom, pausing on the way only long enough to say to Fromeyer:

"Mum's the word, conductor."

When the train pulled into the Union Station at St. Louis the actor returned to car 3 from the diner and said to the porter:

"Take my suit-case to the platform, please."

The porter did as requested; then said to the actor:

"That bag o' your'n is some hefty, boss. Seems like you was carryin' a line o' hardware."

It Was Some Heavy.

"No; merely neckwear," answered J. J. W. with a smile. "Here," hailing a station-porter, "put this bag on a cab."

After the station-porter had placed the suit-case at the driver's feet on the cab he turned to the actor and exclaimed:

"Gee, but that bag's got weight into it, mister!"

"What's the matter with all you porters?" said J. J. W., again smiling. "You must be weaklings. That bag is not heavy at all." Then he called to the driver:

"Southern Hotel!"

When the cab pulled up at the Southern the bell-boy who came out and carried the suit-case of the arriving guest to the desk wiped the perspiration from his brow, though it was a cool day in November.

"Your bag is sure loaded with ore," the boy said to the actor, after the latter had registered himself as "J. J. Wilson, New York."

"You're all crazy in St. Louis," answered Wilson. "Here's my key. Number 424. Carry that bag up for me."

In his room, Wilson hurriedly opened his bag with the intention of putting on some clean linen before going to the theater. As he lifted the cover he stared in dumb amazement.

Only men of certain professions would have recognized the contents of that bag. A newspaper man would have known, in a general way, the nature of the implements.

He Had Played Burglar.

A detective or a policeman would have been able to give each tool its name. One actor in ten might have been able to define the uses of those heavy objects.

J. J. Wilson was the one actor in ten.

"A burglar's kit!" he exclaimed.

Wilson had twice played the part of a burglar in melodramas, and he knew the uses of the folding jimmy, the rubber gloves, the electric lamp, the "squeezer,"

and the "pitch" drills that were now revealed to his astonished eyes as part of the contents of his bag.

"Some one's playing a joke on me," he muttered. "Maybe I'm cast to play burglar again—and this is the work of some manager who loves a practical joke. And yet—no, it can't be. What's the mystery, anyway? Supposing I'm caught with these things in my possession? It's against the law. I'll take them to the police right away."

He emptied the bag of all else save the burglar's outfit, then hurried with it to the elevator. As the elevator reached the lower floor it jounced up and down a moment,

looked at his watch. It was a quarter to eight.

"Hang the bag!" he exclaimed. "There's no time just now to take it to the police. Here, boy, take this bag up to 424."

Hastening across the street to the Olympic Theater, which is directly opposite the Southern Hotel, Wilson entered his dressing-room; then suddenly cried:

"By Jove! I've forgotten my make-up. Dresser—oh, dresser!" he called.

A tired, seedy man thrust his head in at the door.

"Go across the street to the Southern, quick!" commanded Wilson. "Here's my key. Go up to 424 and get my make-up



"KINDLY PAY NO ATTENTION TO WHAT I'M ABOUT TO DO."

box. Hurry! Make believe you're going to a fire!"

Five minutes later the dresser reappeared. The first thing he did was to wink significantly at Wilson.

"Well, where's the make-up?" cried the actor. "I'll be called in less than twenty minutes. Hand the box over, quick!"

"I ransacked your room, Mr. Wilson. But I couldn't find your make-up box. I opened your suit-case during the search, and—"

Caught with the Goods.

"Great guns, man! You found those tools?"

"Yes, sir. That's all right. I understand. You're cast to rehearse a burglar's part here in St. Louis."

"Never mind. Borrow make-up from somebody. Be quick!"

After the play, Wilson went direct to the club, where he performed his professional "stunt," and then returned to the Southern.

"The clerk would like to speak to you, Mr. Wilson," said the bell-boy.

as elevators will in unskilled hands—and the bag flew open.

"Jiminy!" cried the elevator-boy, his eyes bulging. He winked at himself in the elevator mirror as the actor hastily closed the bag and stepped out of the car. Just then, too, a bell-boy stepped up to Wilson, saying:

"You're wanted at the telephone, sir."

The Journey Interrupted.

Wilson hurried with his bag to the telephone-booth, where some one on the wire invited him to come to a certain club after the show that night to do a professional "stunt."

As he came out of the booth Wilson

"I'm to be pinched for having that kit," the actor thought.

"Mr. Wilson," said the clerk when the actor reached the desk, "a strange thing has happened in your absence. Captain McNaughton, chief of police of Hot Springs—he's well known to us—called and went up to your room and took possession of certain tools"—here the clerk winked—"that happened to be in your suit-case. He left word that if you want the personal belongings missing from your bag, you're to come down to the Union Station

the gates to the Rock Island train that was about to pull out for the Southwest.

"Well, here I am," he told himself. "But how the old Harry am I to know Captain McNaughton when I see him?"

Just then a Pullman conductor stepped up to him, saying:

"You rode down with me from Chicago yesterday, sir. You occupied section 9, and you carried a suit-case marked 'J. J. W.' All right, chief," turning to a third man, "this is the actor."

"Hope this thing hasn't caused you any inconvenience, Mr. Wilson," said the stranger. "A burglar called 'Big Joe' Finlay took liberties with your suit-case yesterday in the Pullman. He's wanted for robbing the Second National Bank of Hot Springs."

Mr. McNaughton then introduced himself.

"I don't understand," said Wilson. "What's the game?"

"Just this: Finlay knew I was after him. His pals passed him word through the car window at one of the stations on the way down from Chicago that I was waiting to nab him at St. Louis. Now, Finlay knew that I could arrest him only on suspicion. He knew, further, that to be caught with that burglar's kit would form most damaging evidence against him. So he contrived to get rid of the tools by dumping them into your bag."

"But how and when did he do the trick?" asked Wilson.

In the Trap.

"It was while you were in the diner. Finlay came out of his stateroom, showed a fake badge to the Pullman conductor here—"

"Fromeyer's my name," put in the Pullman conductor, shaking hands with Wilson.

"Yes, I've Fromeyer to thank for the fact that I nabbed Finlay, and also his suit-case containing your property," said



"YOUR BAG IS SURE LOADED WITH ORE."

before the Rock Island train pulls out for Hot Springs at eight o'clock in the morning."

More mystified than ever, Wilson went up to his room and found, surely enough, that some one had taken the burglar's kit.

He was awake all night, trying to make a guess as to the meaning of the tools and of the visit of the chief of police of Hot Springs.

He Meets the Detective.

The next morning Wilson arrived at the Union Station and hastened through one of

Captain McNaughton. "When I showed up on the arrival of your train last evening, and told Fromeyer that I was after a certain crook and described him, Fromeyer cried:

"'Why, that's the man in stateroom A! It's all right, cap. He's in that room now. He hasn't come out yet. You've got him in a trap. So he isn't a chief of police at all, but just a bank-robber!'

"We then tried to open the stateroom door, but it was locked on the inside. Fromeyer produced a key and we opened the door, but the prisoner had flown. He had crawled out of the window. He left his suit-case behind, however—and here it is, Mr. Wilson. Take out what belongs to you."

The Lynx-Eyed Explains.

"But how were you able to trace me to the Southern?" asked Wilson.

"Easy enough," replied Captain McNaughton. "Mr. Fromeyer remembered that the initials on your suit-case were 'J. J. W.' We called up the various hotels, asking if any one with your initials had registered, and so found you."

"But you say the bank-robber, Finlay, escaped by way of the window," said Wilson. "Yet you tell me you nabbed him. How's that?"

"Yes; we got him, all right. Fromeyer and I rushed into the station in the forlorn hope that perhaps we'd catch him passing through. We got as far as the cab-stand, when Fromeyer suddenly cried:

"'There he is, captain—the man getting into that cab!'

"A minute later I had my man. Good-by, Mr. Wilson. Thank Fromeyer for the fact that you got rid of those burglar's tools so easily and that you recovered your property. I'm taking Big Joe Finlay to Hot Springs on this train, tools and all."

The Would-Be Peacemaker.

A Chicago and Alton conductor, out of St. Louis, related this story:

If ever a railroad man loved peace, it was Thomas Mooney, the Chicago and Alton station-agent at Jerseyville, Illinois, just north of St. Louis. Tom Mooney hated anything resembling a row. When the railroad assigned him to Jerseyville he was overjoyed. He had heard that Jerseyville simply reeked with tranquillity. Tom Mooney

liked to air his views on international peace. One day he said to a conductor, Ham Stone, of the St. Louis local:

"Yes, sir, the day will come when the profession of arms, now regarded as honorable, will be deemed the most disgraceful of callings."

Declaring War.

That same evening, at ten o'clock, while Tom Mooney was sitting in his office smoking his pipe of peace, four young men entered excitedly.

Peering out through his ticket-window, the station-agent recognized four young men of Jerseyville, headed by Charlie Skates.

"We'll get 'em here," said one of the quartet.

"Yes; they'll come here to take the train for their punk town, Alton," said another.

Just then Tom Mooney stepped out of his office, saying:

"Sounds like you are declaring war against some one."

"Bet yer!" was the reply. "Those four Alton fellers, with Curley Maretta leadin' 'em to the bad, have insulted us and the town of Jerseyville. They say that Jerseyville isn't on the map, because we're some short of the fifteen thousand population of Alton, and because we're on a branch line of the railroad, while Alton's on the main. Yes, Mooney, they insulted us, and somebody started something, and we're not through with 'em yet. We're layin' for 'em here."

"You can't use this station for a battlefield," announced Mooney authoritatively. "Besides," he added, "why not settle your row peacefully? Instead of punching those fellows' heads, why not meet 'em like gents and frame up a treaty of peace?"

Just then the four Altonites entered, and one of the Jerseyville men cried:

"Mooney, you stay out of this."

The Altonites certainly heard this warning, yet one of them shouted:

"So you Jerseyvillians have got a reenforcement, have you? Well, you bet he'll stay out of this!"

The Fight Is On.

With that, one of the Altonites seized a framed time-table from the wall and smashed it on the agent's head.

This, of course, started the worst row

ever known in tranquil Jerseyville. The eight young warriors closed in, and a terrific hand-to-hand fight ensued.

"No, no!" cried the station-agent as he wiped the blood from his face. "Don't fight, boys!"

He hurled himself into the mêlée to separate the combatants, and received a blow that sent him staggering across the room.

Not content with hands for weapons, the warriors now grabbed various implements of war, such as the poker, the coal-scuttle, the stove-shaker, and a lantern. One even lifted off the door from the red-hot stove and let it fly at the nearest of the foe. Another produced a Bowie, and two of the enemy were badly cut.

While using these weapons on one another, the battling champions of Alton and Jerseyville herded against the stove. They knocked it over, and the live coals set fire to the building.

Tom Mooney, wounded in a dozen places, found himself lying flat under a heavy overturned table, which, in the wrecking of the station, had been used as a battering-ram to fell him.

One unkind warrior now proceeded to jump on the table with both feet, threatening to crush the life out of the man underneath.

At that critical moment two constables burst into the room, armed with pistols and clubs. All the combatants were immediately made prisoners of war.

Mooney Was Well-Creased.

When they lifted the table from Mooney, however, they heard the well-pressed and well-creased station-agent saying in a weak voice:

"You can't take me a prisoner of war—no, sir! I'm a non-combatant, that's what I am. I was merely trying to restore peace when those fellers set upon me. I'm the flag of truce. I'm the red cross."

"In that case, Mooney," said one of the constables, "you can stay by the wreck, while we tote these prisoners off to the calaboose."

"Fire!" shouted one of the prisoners, reminding all that it would be a good thing to get to work and save what little of the station there was left.

All hands, even the eight prisoners, began fetching water, and soon the flames were extinguished. Having finished the ex-

citing work of acting as a fire department, however, some of the prisoners began edging away.

"Stand still!" commanded the constables. "The first man who tries to escape gets shot."

The prisoners were marched off to jail.

The next morning Mooney arrived at the wrecked depot, a mass of bandages and court plaster.

A Real Fighter, Now!

"Why, Mooney!" exclaimed Ham Stone, the conductor of the morning local from St. Louis, as he entered the station to get his orders, "you look like you'd been in a fight. Thought you were a rooter for international peace."

"I was, Mr. Stone," replied Mooney wearily, "but I ain't no more. Why, umpires at ball-games get better treatment than peacemakers."

"Look at this station! Not a stick of furniture left intact. Not even the cast-iron stove! And it's colder to-day than the coast of Labrador. And then—gaze on me. I say, look-at me!

"Ain't I a sight? No, sir! I won't be an advocate of international peace any longer. I'm going to resign my job and enlist in the United States army. Soldiering is far more peaceful than railroading."

"But you can't enlist in the army," protested Ham Stone. "They won't have you."

"Why?"

"Because, Tom Mooney, this here business of acting as peacemaker has caused you to be disqualified physically now and forever as a soldier in any army in the world. A soldier is a fighting-machine. Do you think Uncle Sam wants a fighting-machine that's been tinkered up in a repair-shop? Not for a minute! No!"

In a Barber-Shop.

A buxom *Juliet* sat in the waiting-room of the Union Station, St. Louis, idling her time until her *Romeo* returned from the barber-shop.

The rise of the curtain shows the barber-shop with three men sprawled in three chairs in the act of being shaved. Enter a fourth customer, keen of eye, alert yet deliberate, who in a single glance round the shop seems to take in everything and everybody.

Noticing that he will have to wait, he sits down, and, while pretending to read a newspaper, makes mental inventory of the facial and physical features and the apparel of the man in the chair nearest the door.

This observant man was one of the cleverest railroad detectives in St. Louis—Bill Herren. He had never failed "to get his

Meantime he observed that the man's trousers were ragged at the bottom, and that below the knee they were stained either by blood or by chemicals.

When the man arose from the chair, Herren took his place, sitting in such a position that in the mirror he could see every move made by the red-headed man. He noted



ONE UNKIND WARRIOR JUMPED
ON THE TABLE.

man." He had caught so many train-robbers through sheer luck that he was called "Lucky" Herren.

What Herren Saw.

Herren noted that the man in the chair nearest the door had just had his red hair cropped close, and that the barber was at present separating him from his red beard. Herren noted further that the man wore new shoes.

"That man is gradually getting cleaned up like one who has suddenly found money," Herren told himself.

that the man's coat was faded. As the man took his hat from a peg the detective saw that it was badly battered.

"Never mind the brush," Herren heard the man say to the boy.

"That man is now going to buy a new suit, after which he will patronize a hatter," mused Herren.

The red-headed man, having searched his pockets for coin, produced a few nickels—not sufficient, however, to liquidate the barber's bill.

Suddenly, after a swift look round the shop, he turned toward the wall, shoved his hand deep into his trousers-pocket,

turned back, and proffered a bill of large denomination to the barber.

Couldn't Change It.

The tonsorial boss said he would have to go to the cigar-stand on the concourse to get the bill changed, and, during the barber's absence, Herren noticed that the red-headed man acted nervously.

The barber returned, and began counting out the change; but the customer stopped the process, saying:

"Oh, that's all right."

At the same time, he seized the bunch of bills, rammed them into his pocket, and started for the door.

Herren, his face covered with lather, jumped out of a chair.

"Just a moment, my friend," he said, stepping between the red head and the door. "If you haven't urgent business elsewhere, I'd like a little chat with you."

Without making any answer, the man turned and rushed to the rear door—only to find it locked. In a flash then he turned, drew a six-shooter, and let fly at Herren.

The shot went wild, and the detective bounded at his man, grasped the pistol with one hand, and began slowly choking his prey with the other hand. Relentlessly Herren's fingers closed upon the man's throat until he collapsed.

Herren disarmed him, handcuffed him, and, when the man was again able to breathe, led him away to the Four Courts.

"Hanged if I know what he's wanted for," Herren declared to the prison official. "But I'm reasonably certain he's wanted for something. Hold him, anyway, for attempted manslaughter."

Just Knew He Was Wanted.

Herren went to the office of the chief of the Wabash secret service in St. Louis, and said:

"Do you happen to want a man with red hair, a red beard, a scar on the right cheek, the tip of his left trigger-finger missing, and a roll of bank-bills of big denomination on his person?"

"The secret-service chief thought a moment, then exclaimed:

"Chi St. Lou!"

Herren sprang up, saying: "I thought so! It's Chi St. Lou—wanted for that hold-up of the express messenger on a train two

nights ago, and for killing the messenger! I've got him—he's over in the Four Courts now!"

"What's he to say for himself?"

"Nothing—except to ask me to take a message to that girl that's waiting for him in the Union Station waiting-room. He described her, named her as Nora Tully, and asked me to give her his message."

"Well, what's the message?"

The Interrupted Wedding.

"Merely this: 'Nora Tully, the wedding is interrupted temporary.'"

Some days later Herren again appeared at the office of the chief of the Wabash secret service.

"You can close that Chi St. Lou case on your books. He's dead," said Herren.

"Warden have to kill him?" asked the chief.

"No. Suicide. Cyanid of potassium."

"Herren," said the chief, "you're the luckiest man on the force. You first capture this train-robber by sheer accident; then your prisoner, by poisoning himself, saves us the trouble of trying him. Did he make any statement before shuffling off?"

"Yes. He asked us to search the cheap hotels near the Union Station for Nora Tully, and give her his last message."

"Well, what's that message?"

"Merely this: 'Nora Tully, the wedding is interrupted permanent.'"

Gilpin's Lost Mine.

Charlie Gilpin is not on the pay-roll of any railroad, yet he is a railroad man, and one of the most interesting of the boys at the Union Station, St. Louis. Charlie has been manager of the Union Station Cigar Company for nearly sixteen years. If you want to know about anything that has happened in the station at any time in all the sixteen years, ask Charlie.

Gilpin is the hero of my tale—the tale of a lost mine.

Some lost mines exist only in a legendary sense—but Charlie Gilpin's is a sure-enough, really-truly lost mine. It's somewhere in the Sierra Madres, in the State of Chihuahua, Mexico, and some day Gilpin may suddenly cry, like *Monte Cristo*, "The world is mine!"

Gilpin put up real money to outfit an expedition to find that lost mine, and the

way he came to let the cash loose was something like this:

A negro named Rastus Warren, in the employ of a certain county official in St. Louis, lay at death's door with smallpox. Calling in his employer, Rastus made this death-bed confession.

He said that some years before, while in Batopilas, Mexico, two greasers offered him a job at their mine. Rastus accepted, and made a two days' journey with a burro outfit, over a trail so rocky and precipitous that the Mexicans called it El Camino Diablo—the devil's road.

Rastus found the mine itself way down in a deep gorge, where it was so dark that they had to work by the light of torches. Gold simply exuded and oozed from the walls of the chambers of that mine, and the three men merely had to pick it off with their bare hands by day and hoard it in their shack by night.

The Fortune Vanishes.

Once every three weeks Rastus was sent to Batopilas for supplies. On his return from the last journey of the kind he found the two Mexicans murdered and their shack burned. Their hoarded gold had vanished.

Fearing that he would be held for the double murder—if an investigation was made and the bodies found—Rastus started for the Rio Grande, carefully avoiding Batopilas on the way. After terrible hardships, he crossed the Rio Grande and found him-

self in Brownsville, Texas. He proceeded to St. Louis, and secured work with a county official, to whom, after five years' service, he made the death-bed confession here given.

After making the confession, however, Rastus recovered his health in full, much to the delight of his employer, who suggested that the negro lead an expedition into the Sierra Madres to find the lost mine.

What Gilpin Says.

Capital was needed. The county official went down to the Union Station, found Charlie Gilpin sitting on his dais at his cigar-stand, and told him all about the golden millions that were out of sight in the lost mine.

The result of this confab was that Gilpin agreed to put up part of the money for an expedition to Mexico.

With Gilpin's cash, plus the coin of sundry other St. Louisans, six men, with Rastus as guide, left St. Louis to cross the Rio Grande and make a dash for the treasure at the bottom of the gorge.



"GOLD SIMPLY EXUDES FROM THE WALL OF THAT MINE."

Weeks passed, and Charlie Gilpin had made all sorts of preparations for starting life anew as a millionaire, when suddenly he received a telegram from Rastus Warren reading:

The five men deserted me the moment we struck El Camino Diablo, leaving me without cash. Am stranded in Chihuahua. Please send money for transportation and expenses home.

I had heard part of the story of Charlie Gilpin's lost mine on a previous visit to St. Louis, but did not learn all the details until I arrived at the Union Station on the present trip. When I went to his cigar-

Mr. Willets, next month, will tell a number of stories of hold-ups in the Missouri River Country.

stand and asked his clerk if the boss was about, the clerk called up to a round, robust and rubicund gentleman sitting aloft:

"Mr. Gilpin, some one to see you."

Charlie Gilpin descended from his eery.

I introduced myself, then said:

"Mr. Gilpin, what's the present market quotation on shares in the Lost Mine of the Sierra Madres, in the State of Chihuahua, Mexico, on El Camino Diablo?"

Now, up to this time Gilpin had looked as pleasant as any photographer could wish. But now an expression of unutterable disgust o'erspread his countenance as he said:

"Have a cigar?"

FROM THE LETTER FILE OF THE SANTA FE.

APPPLICATION for a pump job recently received by General Foreman Williams at Las Vegas:

My dear Sir:—I beg to state that I will ask you for permitt to write you a line or two. Regarding job pumping, if you would be so kind to favor me with it. I have wrote you about a year ago about a job asking you for the pump in Bernalillo, as I was told by Mr. L. Garcia, that hi will retire from the job. So I have an answer from you that you will gave me the first chance you will have, so I am waiting yet. And the old men Garcia is not able to work as hi is blind, I am writing you another letter about that if you would so kind to let me have the job. I have bin working for A. T. & S. F. for many years as car men, My Dear Sir: let me hear from, regarding pumping job, if not here would go some where else if desire, thanking you in advance for the favor I ask for, I hope to hear from you at an early date and hear that my fortune is ripe waiting on a pump. I wish my letter will find you in best yumor to keep you from turn me down. These pump here I would like to have better than any other as here is my home, but if is already given away would take some one else. I will promise you a steady hand.

Yours truly,

Cashier Skaggs, at Kingman, Arizona, makes a guess that the writer of this letter was either a Chinaman or a Jap:

To Baggage office Kingman Ariz.

Gentlemen. I promise you that you'll send down my trunk to here on last fly-day. But they

did not express yet. I wish you that you will send down to here in rigd away. If you want charge to send for I will pay at here. Yours truly

MON

The "lawyer" club which this woman held over the head of the agent at Miltonvale, is not infrequently used by persons with fancied grievances against the company:

to agt of miltonvale Depot say what is the matter with my baggage you better start that on I seen a Layier last night he said when I took the trunks to the Depot they was in your care: and enother thing he said they couldnt hold your baggage for an account of that kind and: he said if you didnt send it to let him no he would send in complaint to the rail road for damages: as I need my clothes so bad: now he says he will see that you pay the damages for keeping my clothes if you dont send them right away; now you better send them and save yourself trouble if I dont get them this week I will let him have it to collect same: I will send a stamp for you to send my checks in now please to attend to this at once or I will let some one else see to it.

Mrs. W—

An inquiry received at La Junta as to whether or not we feed the cars:

mr. rail road agent sir i am going to ship som horses to east st louis and i wish you would give me the rates on cars and if they run them clear through without feeding them and if they feed where do they feed at.

Kenton okla write write

JOHN L—

—Santa Fe Employee's Magazine.

There's many an honest heart beats on the front end of the blind baggage,—but it's against the rules just the same.

—Soliloquies of the Sympathetic Shack.

REDDY FLAGG'S REGRETS.

BY PETER MULLIGAN.

A Few Leaves from the Biography of
a Boomer, by His Admiring Friends.



"GOIN' to church to-morrow, Bill?" inquired Jack as Larry Carr's crew settled down in the old switch shanty in the north yard to wait for sixteen to show up. Pop Hickenlooper was on sixteen that night, and Pop was a man of too much spirit to allow his movements to be dictated by an old time-card.

"No, I don't have to; I'm immune. I've associated with railroad men for so long I've got so tough that brimstone wouldn't feeze me. I'm going to stay at home and pound my ear."

"I haven't been to church since I was first set up on the Consolidated Combination," ruminated Jack, half to himself. "They gave me a corn-field sailor for head man on my first trip. His first crack out of the box was a straddling switch which blocked the main line and laid out the limited three hours. Since expressin' my opinion of Mr. Sailor's qualifications as a railroad man, I've been ashamed to look a preacher in the face."

"Speaking of language," said Bill, "reminds me of the winter I was firing for Jim Fannum on the Rebate Route. There had been a blizzard that had tied up the road for three days. As soon as they got a snow-plow through, nothing would do but they must ship a lot of hogs from Jaytown, although a high wind was still blowing and it was cold enough to freeze the hair off a brass monkey.

"We were sent up light to get the hogs. By the time we were ready to start back it was night, and the wind was coming up every minute. Some clever railroad man had thoughtfully forgotten to set a brake on

a box car that had been left standing on the house track at Reubenville.

"The air was so full of fine, gritty snow we couldn't see that the wind had blown this car down close enough to the main line to sidewipe our engine. Among other little trifles we busted a valve-stem.

"There we were in a young blizzard with a lame engine and a trainload of hogs on our hands. Fourteen loads was a full train on a good rail up the Reubenville hill. Our conundrum was how to get eleven loads up with an engine working one side and the coal so full of snow that it was like turning a hose into the fire-box to shovel it in.

"But I managed to get her warmed up finally, and then we backed up and made a run for the hill. Of course we stuck.

"Double," says Jim to the head man.

"Aleck Kupelo had picked up an old-time rock off the Q for head man that night. He was humped up over the boiler-head trying to thaw out and shivering to think of what was coming when she laid down.

"He made some shocking remark or other when Jim spoke, picked up his glim, floundered out, and cut off behind six. How we ever got up the hill, even with six cars, through the snow with an engine working one side, I'll never tell you, but we did it.

"The switch on the Summit Siding was half a dozen car-lengths beyond the top of the hill on a pretty stiff little down-grade, and, being under the lee of the hill, the snow was drifting badly. Of course, under such circumstances, nothing would do but she must stop on the center.

"The new brakey got out the pinch-bar and grunted and clattered and slipped and swore until he got her off the center. When Jim gave her steam, the wheels spun around

in the snow without taking hold; and when Jim eased her, she stopped on the center again.

"Brakey pinched her over a second time with exactly the same result as before. By this time he was getting speechless, but he went at it once more.

"By this time he was getting so mad he didn't know what he was doing. First thing he knew, he grabbed the frosty pinch-bar with his bare, wet hand. It stuck to the bar instantly as if it had been glued.

"Well, sir, that man let out a howl such as I've never heard come from a human throat before or since, and followed it up with a reg'lar cloudburst of such outrageous language that the hogs in the head car squealed and surged madly toward the back end to get out of hearing."

"That sounds like Reddy Flagg you're describing."

"Sure! That was his name. D'you know him?"

"Know him! Everybody knew Reddy Flagg. He braked on every division from New York to San Francisco, and switched in every yard from St. Paul to Galveston."

"Reddy certainly did have the itching foot. Always rode in the varnished cars, too."

"Yes, he was an insinuating cuss, and I never heard of a conductor refusing him a ride."

"Down on the Indian Valley Road, he was known as 'The-Man-With-the-Velvet-Touch.' A new man couldn't consider himself initiated until Reddy had borrowed a dollar of him. Permanent loan, of course."

"Wonder what he ever did with his money?"

"Spent it for dictionaries and bronchial troches, I guess. Give Reddy an excuse to say a word and you'd get an artesian flow of language in a voice that—well, say—when Reddy was conversing in Denver you could hear him in Omaha."

"Well, you'd have thought so if you could have heard him that night. We kept pinching her off the center and twirling the wheels around in the snow for half an hour. Every time we didn't move 'em, Reddy would hook his voice up another notch and touch off a new cuss word.

"When we tried shoveling the snow away from the wheels, it blew back just a little faster than we could paw it out. We couldn't back them cars up that rise to save our immortal souls; so we did the next best and

went on down the hill to Weed Center, which was an all-night telegraph station.

"When we stopped at the station while Aleck went in to report, instead of settin' his cars in on the side track or going inside to get warm or otherwise conducting himself like a civilized being, Reddy began promenading up and down the platform cussin' everybody who ever had anything to do with the Rebate Route, from the aboriginal owners of the right-of-way to the trainmaster who had ordered us out.

"There was a little runt of a deputy marshal, or night watchman, or whatever you call 'em, who had just been put on the job. He imagined his nice new tin star was a special license to butt in on all occasions. So up he trots to Reddy and says, says he:

"Say, mister, you ought to try to control your feelin's. If you was to get a piece of that language cross-wise in your throat it might choke you to death."

"Reddy let out a whoop and lunged at the deputy, who broke for tall timber with Reddy a close second. I guess Reddy's chasing him yet, for he didn't show up again that night, and I've never seen him since."

"Of course, you didn't see him again such a night as that. The deputy marshal was an interposition of Providence to lead Reddy out of the way of hard work. No fear of him sticking to the chase. He never stuck to nothing."

"I was holding down the hind end for Billy Train on local on the Receiver's Snap, one fall, when Reddy floated into town, and I got him on ahead with Billy," said Bill. "One day we were rawhiding at Water Lake. Reddy was walking sidewise ahead of a string of cars that was backing up trying to get a crooked link into position to make a coupling.

"Remember when no two cars with draw-bars of the same make or the same height from the ground were ever on the same road at the same time? Every engine and caboose had to carry half a car-load of assorted links and crooked links and flat pins and round pins and just pins, and it took a specialist to make a coupling.

"The road was new, the siding wasn't ballasted, Reddy got reckless, and down he went. Before you could bat your eye, the first car was upon him, of course.

"Billy, who was standing on the main line watching him, yelled at the engineer and thrashed his arms around like a windmill with the jim-jams, signaling him to

stop. Then he flopped down on the end of a tie and covered his face with his hands to shut out the ghastly sight.

"Old Tom Quadrant plugged his engine, but couldn't hold 'em quick enough to do any good. I was letting off brakes on the cars we were getting hold of. When I heard Billy yell and saw him flop down on the end of the tie that way it made me feel kind o' sick, for I guessed what was up, but I hoofed it back at my best gait.

"When I reached the scene the cars had come together and stopped. I could see the body lying between the rails. When I tried to speak, my tongue was so numb I had to make several efforts before I could utter a sound.

"Reddy, old boy," says I, 'are you done for?'

"At that he rolled his head slowly till I could see his face. His eyes glittered like a snake's when you have been poking it with a stick—but he didn't say a word. He had fallen between the rails and had had sense enough to lay down till they stopped.

"He crawled out and felt himself over with great deliberation.

"There wasn't a scratch on him, but his coat-tail had been cut off about half-way up his back. He reached under the car and drew out the amputated cloth, still without uttering a sound or even appearing to hear the anxious questions of Billy and myself.

"He spread the coat-tail over his two palms like a woman holding a pie-crust, and marched solemnly toward old Tom Quadrant, who was leaning out of his cab window still looking blue around the gills from the effect of thinking he had killed a man.

"Reddy kept filling his lungs with air and his mind with indignation, and swelling out his chest at every step until he got his face up within two feet of old Tom's. Then he held up the coat-tail in his palms and bellowed with all his force:

"You infernal old wooden-headed, leather-jointed, wind-broken misfit of a plug-puller! Do you see what you've done? That coat was too short already! Now I'll have to stand with my back to the sun all winter to keep from freezing to death."

"Remember the Cactus and Sagebrush line that sticks out into Wyoming like a sore thumb?" asked Larry.

"Sure; they started to build a road somewhere, but forgot where it was."

"Wrong. Reddy stopped the construc-

tion. They were doing a land-office business in track-laying on that line in 1886. There were two trains at the front, a steel train and a tie train, and they were laying about two miles of track a day. Half the men were Republicans and half Democrats, and there was bad blood between them, owing to the fact that there it was close to an election.

"Reddy was braking for Tom Higbee on the tie train. The country was full of antelope. Every once in a while a herd of the little rascals would come up on the crest of a hill within a quarter of a mile of the works and gaze at us until their curiosity was satisfied; then they would stick up their heads and their stubby white tails and go bouncing, stiff-legged, out of sight. It was enough to fire any man's sporting blood, and Reddy decided, one Sunday, that he simply must go antelope-hunting.

"Reddy was the sort of marksman who couldn't hit a barn if he was locked up inside of it. In fact, he had to stop and ponder to make sure which end of his gun he ought to point at the game.

"Nobody would go with him, for they were all on to the quality of his sportsmanship. So he borrowed a rifle from the engineer of the steel train and started out alone.

"He kept to the tops of the ridges, where he could have a good view of the country, and whistled his loudest to keep from feeling lonesome. For about four hours he paraded the prairies in this style without bagging any antelopes.

"Then his whistle gave out, and he began to walk down-hill because it was easier, until he found himself in a coulee which hid him from view. Thus he inadvertently approached so near a herd of antelope that he caught a glimpse of a bunch of white tails just tipping over a hill a mile away.

"Reddy sat down to lay out a plan of campaign. He was too tired to stand, anyway. After harboring a suspicion for a few minutes that something was wrong with his antelope-stalking tactics, he had an inspiration.

"He had heard that hunters on the plains stuck up a little red flag on a stick and then laid down near by and waited for the antelope, which are more curious than a woman, to come up to investigate, when they could be picked off at leisure. He had no red rag and no stick; but he did have on a suit of red underclothes. Now, if an antelope could work up a profound interest in a red

rag, it stood to reason that the animal would be simply entranced with a whole suit of red.

"Reddy peeled off his outer duds, cached them in a cozy nook in the coulee, and marched off in his flaming undergarments like the pillar of fire that led the Israelites out of bondage, with his rifle at full cock. He was so lost in admiration of his own clever scheme that he didn't notice that the coulee opened into a little flat with a rank growth of grass, and that he was walking straight into a herd of cattle which was feeding there.

"But a big bull did notice it, and was very properly shocked to see Reddy appear in the presence of the ladies of the herd in such attire. As soon as he could recover from his astonishment, Mr. Bull said something which was the bovine equivalent for 'Skiddoo!' and then, for fear the intruder wouldn't beat it fast enough, he put down his head and stepped forward to see that he went.

"Reddy forgot all about being tired. He threw the rifle as far as he could send it, and set out for camp as if he were going somewhere for something and was afraid it would all be gone before he got there.

"Fortunately for him, he had been traveling in a circle, and was not more than a mile from camp. The angels, who are always around to take care of those who are incapable of attending to the job themselves, turned his face in the right direction.

"Reddy didn't take time to side-step cactus-beds or anything like that. He took a header or two, got scratched and bruised, and every step he took the more scared he grew. In fact, the more he thought of it the more certain he became that he could feel the maddened animal's hot breath fanning his neck as it strained to gain the one step more that would enable it to plunge its sharp horns into his gizzard.

"But he didn't feel anything of the sort; for the bull and a bunch of steers, which had followed to see what the row was, had only kept up the chase to the top of the hill, where they all stopped and stood there gazing after Reddy, and wondering what in thunder the fellow was in such a hurry about.

"Reddy was pretty far gone when he reached the front end of the boarding train. His breathing sounded like the exhaust of an engine that needed her packing-rings set out.

"He laid a course for Higbee's caboose along the track beside the boarding cars right through groups of Republicans who were lolling about in the shade, smoking, sleeping, sewing, and jabbering; ran through a card-game, upset a couple of men, scared another into fits, and plowed on toward the Irish end of the boarding train.

"Naturally, Reddy's headlong career caused some excitement. The Republicans shouted and jabbered, and all jumped up, while some ran after Reddy to find out what on earth was the matter with him. The Democrats heard the tumult, and seeing a man who looked as if he had just passed through a hard winter running for his life with a lot of Republican sympathizers following him, they jumped at the conclusion that the Republicans were trying to murder a Democrat. That was enough.

"The Democrats raised a war-whoop and, seizing picks, shovels, spike-mauls, crow-bars, and whatever else was handy, fell upon the Republicans who were chasing Reddy, and drove them back to their own end of the train. In another moment there was one grand mix-up, without any one knowing what it was about.

"Reddy couldn't speak for five minutes after he reached Higbee's caboose, and by that time there wasn't any one to listen to him, for all hands had turned out to try to stop the fracas—or to get into it. There were too many old scores to even up, though; and, once they were at it, those fellows didn't care what started the rumpus. They just swatted one another all around over the landscape until the whole outfit was knocked out or tired out.

"Next day there weren't men enough fit for duty to make up the gangs, and the survivors were so hostile it wasn't safe to get 'em together, anyway. The contractor fired a few as a warning to the rest. That made some more mad, and they quit; and others went back down the line to get their heads sewed up and forgot to come back. The first thing the contractor knew he didn't have men enough to run a hand-car.

"After Reddy had paid for the gun he threw away, and had bought clothes to replace the ones he cached in the coulee and couldn't find again, he concluded that the air at that altitude didn't agree with him, so he pulled his freight. That was the last I ever saw of him."

"There's sixteen whistling in! Head him in on four, Bill!"

THE STEELED CONSCIENCE.

BY GEORGE ALLAN ENGLAND.

The Degree of Master Cracksmen Is Sealed With Graham's Own Blood.

CHAPTER XVI (*Continued*).

Progress and a Piece of News.

PIANO and Graham had many more talks, in periods of idleness between crushes. From his former cell-mate and from the others Graham learned to the uttermost detail all the minutæ of yegg lore, the language of the trade, its history, and its stringent moral code. The ordinary box-man, he found out, is usually an ex-mechanic or artisan.

He learned that yeggs always operate in gangs, for the most part known by the leader's name, as "Chi Jack's mob," or "Pitts Whitey's mob." Their true names are never asked or given, but are replaced by "monicas" derived from some personal peculiarity or from the place of origin. He grew wise in reading their records on stations or water-tanks; such marks as "Long Ed, 4|19|08, E," or "B.B., 2|12|09, S," came to convey much information to him.

He learned that the highest yegg virtue is fidelity; its basest crime, treason. A "bawl-out" or a "leak," he found, was always punished by death. Sometimes, they told him, a mob would have to wait years to get a "beef" who turned them up; but eventually the traitor always got a leaden pill that sent him up the escape for keeps.

The elaborate system of "giving up" or "greasing" for protection by the police he came to understand. He discovered where the proceeds of breaks almost invariably went—to the race-track or the roulette-wheel, on the principle of easy come, easy go. Very many yeggs, he found

out, were addicted to "coffin varnish," "white-line" and "Doctor Hall," that is to say, bad liquor, which usually finished them.

From their conversation he learned of the ferocious sentences dealt out to yeggs, when caught, and of how the policy reacted by making yeggs never hesitate about killing, if cornered. He learned all about "moochers" and "punk-kids" and "town plugs" who spy out the land in advance of a raid; about the use of "phoney" union cards to insure freedom from molestation on freight-trains or elsewhere; and about endless apparatus used in different circumstances—endless methods, too, about which a fair-sized book could be written. He heard many tales of fights resulting from the division of the spoils, and, by way of contrast, came to know all about the collection of "fall-money" and the liberality of yeggs when asked to chip in for the hiring of a "mouthpiece" to "spring" a friend in trouble.

Ciphers of a score of kinds he learned to read and write. The art of disguises became for him an open secret. Wise he became in methods for distracting the attention of the bulls and misleading them; wise in lampblackening a key and by the scratches on it reading the nature of the lock; wise in using the jimmy and in entering tight places. He learned that a man can always get into a place which will let his head and extended arm pass; and that, before going in, it is always necessary to be sure one can come out again.

Under Piano's careful tuition he learned to read the inner structure of a combination by the different sounds produced in turning the dial. So acute and sensitive did his

Began in the October Railroad Man's Magazine. Single copies, 10 cents.

ear become, that he could tell at what numbers the tumblers dropped into place. He grew to love their fine metallic sounds. His keen senses and delicate fingers attuned themselves to the work.

No Wagner could thrill him, no Beethoven set him dreaming so potently as that slight and all but imperceptible click-chink-tink, that his instructor taught him to understand and to divine the meaning of. Once or twice he had the chance of actually opening, while out on a "hike," a safe-door by this species of manipulation. It fascinated and enthralled him.

The others were delighted. Adam prophesied great things for him, and Piano was frankly radiant. Not even the jealousy which, deep down in his heart, the teacher already had begun to feel, could stifle his pride in having brought into the mob so splendid an intelligence, so deft a hand.

The crushes were only incidents, after all, in a rather leisurely and luxurious existence. Much of the time, Graham read and studied. All his former friends and acquaintances he carefully avoided; where he had vanished to, none of them knew—or seemed to care. Sometimes, of an evening, he walked abroad with Piano in strange parts of the city. He visited the "ink-pots" of low-class members of his own trade, filthy dives usually run by an ex-yegg and patronized by unkempt petersmen.

On Park Row, Pell and Doyer Streets he found a number of such places. Sometimes he dropped in to a "drum" where stale beer and vitriolic whisky were sold at two and three cents a glass. Again, he went the rounds of some of the "doss-houses"—bare and cheerless dens, with a whitewashed, pot-bellied stove in the center of the room, recruiting signs and three-cent lunch-room ads on the walls, and discouraging wrecks of men lolling on the hard wooden benches, reading last week's paper.

He came to know dozens and scores of curious types, the existence of which he had never even suspected when a member of the upper-world. Whole strata of society opened out before his eyes, strata with their own conventions and standards of conduct, their traditions, laws, virtues and vices, as real, complex, and binding as those of so-called respectability. Through and through he came to learn the under-world, from "gorillas" to "scratchmen," and from "super-twisters" to "mission stiffs."

Some of the braver and cleverer ones he respected; some who sneaked and defrauded, who, as political heelers, were "in right," or who acted as "fixers" and professional go-betweens, "lamasters" or professional straw-bail men, he despised. There were all sorts, he saw, in the world below, as in the world above.

One of the favorite diversions of his mob was to see in the different papers, the morning after a break, the varying accounts given by imaginative reporters and sensational headline-writers. To read that a dozen desperadoes had swooped down upon a town, held it up at the point of automatic revolvers, blown the safe to atoms and decamped with crackling volleys, pleased them immensely; for the truth usually was as quiet and unobtrusive as they could possibly make it. There was a little pepper in the work, once in a while, to be sure; but not once that summer did any of the gang take any bodily harm. Graham came to believe that the fine old-time epics of crushing were things irrevocably of the past.

Next morning at breakfast, while reading an account of the "Desperate Pitched Battle Between Townspeople and Masked Banditti," Piano came across an item that made him start and frown.

He marked the place with his nail and handed it across the table to Graham.

Graham, his heart beginning to thump, read at a glance:

PROMINENT PHILANTHROPIST RETURNS.

GENOA, Sept. 19.—Among the passengers sailing to-day on the Koenig Albert is the well-known lawyer and philanthropist Simon Dill. Mr. Dill has been for the past four years living at Cannes, Nice, and other resorts on the Riviera, in search of health. It is reported, however, that this search has been only partly successful. Retirement from active life seems to have failed to restore him.

He intends, it is said, to settle some business affairs in New York and then return to his practise in Boston. He is accompanied by his daughter and only child, Miss Agnes Dill.

CHAPTER XVII.

Discovery!

CONTROLLING, by a mighty effort of his giant will, the strong emotion that possessed him, Graham laid the paper down, carelessly enough, shoved back his chair, got up and walked into the smoking-room at the

front of the flat. The look he gave Piano bade him follow.

When they were together, and the door quietly closed, Graham seized the other's arm. He thought a singular light was playing in his companion's eyes, an odd smile lurking about his mouth; but this was now no time for close analysis.

"So, then?" said Graham with keen excitement.

Piano laughed easily. "I guess you know what that means," said he.

"Means?" repeated Graham. "Why, it—it means that the old man's conscience has been troubling him. No, not that—he hasn't got any. His bump of caution, rather. He must have known, for some time now, that my bit's done and ended, and that I'm at liberty. I don't doubt my disappearance from the ranks of respectability has been duly communicated to him. So, then—"

"Oh, he's worried, all right enough. Worried, sure as guns! But it isn't that I was thinking about. It's nothing to us, or to you, what's bothering him. You've got something of a bother, yourself, seems to me. He'll be here, now, inside of fourteen days. Yes, two weeks from now things will be settled, one way or another. How's your nerve, bo?"

Graham laughed uneasily.

"I guess it's all right. It's got to be! I wish it was only a question of nerve, down there on Spring Street. But from what you've told me, it'll take more than just that."

"Right you are. Fact is, the nearer we come to this thing, the worse it looks. Give me a tool-steel mountain and let me get at it, and I'll guarantee to crack it plumb in two; but that crib there, fixed as it is—well—"

He drew a pencil from his pocket, and on the fly-leaf of a "History of the Italian Renaissance" that Adam had been reading, rapidly sketched out a plan.

"Here, you see," he explained, "is Spring Street. There's the courtyard, in back. Every window has electric alarms, so that if a single bar is cut, a whole drove of bulls will come stampeding. No use trying to get in that way. Absolutely out of the question.

"The big door is worse." He tapped with his pencil on the plan. "Electric-light post right in front of it, you remember. Hopeless, even in the dark. A three-hours' job, even without the alarms. Nothing doing."

"How about the roof?" asked Graham eagerly.

"Two skylights. Barred. Alarm attachments. Fact is, my boy, it looks infernally awkward all round. I've been sort of putting it off, putting it off, thinking that maybe something would suggest itself to me, or to you. It didn't look so ugly three months ago. Just the general idea was fine and dandy; but now, coming right bang up against the immediate necessity of doing it, why—" He ended with a shake of his head.

"How about it, inside?" asked Graham. "You've already told me about the armor-plate and concrete. But just where is the—the room, you know?"

"Sixth floor," answered Piano. "Toward the back—so."

He drew a floor-plan, with square marks for the elevator-wells, a long corridor leading from side to side of the building, and several transverse ones opening out toward the courtyard.

"Here," said he, touching a certain spot with his pencil. "I feel that, if we could only get a few moments' interview with that door, right there, we'd be going some. The safe, inside—that's a mere detail. It's getting at it that bothers me! That, and the knowledge that it's got to be done C. Q. D. Not an altogether lovely layout, now, is it?"

Graham did not answer, but, leaving Piano still looking at the plan, put on his hat and went out. They did not see him again till late that afternoon.

His objective-point was the Public Library, at Fifth Avenue and Forty-Second Street. All the way down-town, as he sat in a corner of the clattering "L" car, absorbed in thought, his mind was a tumult of hopes, fears, plans, speculations, intricate and seemingly unanswerable questions. First rose to his consideration the fact that Dill was coming back, was even now on the steamer, plowing up the Mediterranean toward Gibraltar and New York.

That, once landed, the old man's probable first act would be to withdraw the packet from its hiding-place, even though he might leave his other goods or valuables at the warehouse, and put it—where? Graham knew not. All that he knew was that, before Dill should have time to carry out what was undoubtedly his plan, the final coup must be put through; all must be risked on this one cast of the dice; the success or failure of his whole life must be staked; his liberty, his happiness, perhaps his very

existence, must be pitted against this one supreme effort which, he knew, baffled even Piano himself, with years of training back of him.

He thought of Agnes. Had she, he wondered, changed much in those four years which had so altered him? Did she still think of him, remember him? Believe in him? Or had Dill been able quite to poison her against him? That, too, remained unsolved in his mind. He must wait, he knew; and only on condition of success in this imminent undertaking could he ever hope to approach her again with the proofs of his first innocence, the justification of all that had taken place since his unspeakably iniquitous sentence.

The warehouse came into his thoughts. He despaired at memory of that massive, stern, gray solidity, the type and picture of property entrenched and defiant—property, however got, however heaped together. Something new, he understood, would have to come into play; some ruse, some subterfuge, some fresh principle, if he were ever to penetrate that fortress and take back the thing which was his.

"But what shall it be? What? How?" he feverishly asked himself, pressing a hand over his eyes.

The forcing of that door, supposing the possibility of ever reaching it, would have to be done quite silently, he knew. In a place of that sort, where doubtless half a dozen watchmen were perpetually on guard, and where quick escape would be out of the question, the work could never be undertaken with nitroglycerin. There was no way of bringing electricity into play, as at Reading. Yet—if there were only some method of developing an equal heat, some noiseless way, by chemical means, then part of the puzzle, at least, would become clearer.

The question he had asked himself before recurred to him. Vaguely he recalled having once read—just where he could not say—a dry, theoretical discussion of the properties of a certain iron compound which, when mixed with some other metal, might, under certain circumstances, produce a very great heat.

"What was it, now? What was it?" he fiercely asked himself, cudgeling his brains in vain for the exact formula. So intense was his thought that his face became set in a savage scowl. He noticed that two or three people were looking at him, and over him came the guilty feeling that his true

occupation must be known to others—a feeling which he never could quite rid himself of, even though reason told him he was safer and more perfectly hidden in New York than he could have been in the most remote village. With an effort he looked out of the window at the dingy second stories, the balconies and clothes-lines of Manhattan.

"No use getting a hot box over it, just yet," he assured himself. "Once I lay hands on a good, up-to-date chemistry manual, perhaps I'll get on the track of the infernal thing. But that, even that, won't solve the other riddle of how to get into the place at all!"

On and on ricketed the train. It stopped, started, swung round curves, and sped its way. At Forty-Second Street, Graham got out.

"Now for the library!" said he.

An hour later found him at a broad table, half-buried with books on chemistry, practical and impractical, analytical, synthetical, commercial, Heaven knows what not. One after another he searched them through, while an attendant brought more and still more books, and, wondering, stacked them in front of this singularly earnest young scientist with the mobile, nervous hands, the pointed beard, and the keen, clear eyes.

At last, after more than two hours' patient hunting, he ran his quarry to earth. He gasped with exultation as a paragraph leaped from the page of a French brochure at him.

"Found it, by Jove!" he cried, slapping the table with his palm so forcibly that the attendant frowned and coughed his disapproval.

Again he read the paragraph, translating half aloud as he did so:

This substance, known as *thermit*, possesses very peculiar properties. It is a simple, grayish-blue compound of powdered aluminum and sesqui-oxid of iron. When ignited with magnesium tape, it burns quickly, producing a temperature almost if not quite as high as that of electric arc itself.

For a moment he sat there as though half dazed, trying to let the possibilities of this discovery filter through his brain. Then, as its full portent dawned on him, his eyes sparkled, his chest expanded with a deep breath, his head came up defiantly. He closed the brochure, thanked the attendant, and took his departure, leaving the dry-as-dusty fellow in as great astonishment as it was possible for him to feel.

Piano, too, was astonished when Graham reached the flat, burst into the smoking-room, flung his hat on the table and cried: "I've got it!"

"Got it, have you?" queried the other, looking up from his paper. "Got what? Measles?"

"No, no, don't you understand?" answered Graham, too excited even to notice the jest. "Got the solution of the secret! Got the whole thing planned, from A to Z! Where's Adam?" he added, lowering his voice.

"Where are the others?"

"Out. Go on, let's have it. Nobody here but us."

"Good! I—I hardly like to let them in on any part of this until I know how it's going to work. See here! I got it made up for me at the Hooper-Jordan laboratories."

He drew from his pocket a small paste-board box, set it on the table (which he cleared by the very simple expedient of shoving half the papers onto the floor) and removed the cover with nervous fingers. Inside, a fine blue-gray powder appeared.

"There it is!" cried he, while Piano stared in amazement.

"There *what* is?"

"Why—don't you see? The stuff I was looking for! Thermit!"

"Oh come, come!" ejaculated Piano. "How do you expect me to understand you? Think I'm a mind-reader? What's the—"

"That's not all," interrupted Graham. "Coming up on the train the whole thing dawned on me—not in its details, you know; those can be worked out later. But the idea, the main idea came to me in a flash, so!" He snapped his fingers. "Now, then—"

"You see here," commanded Piano. "Calm down! Count out the pill-prattle and get down to first principles! If I didn't know what a well-balanced head you've really got, I'd think you'd gone suddenly pipes above the ears. Now, take off your collar and shoes, get into slippers, like me, light the long pipe and let's have things straight. You hear me? No, no, I won't listen to a word till you get ready to do this thing right!"

Graham found Piano inexorable, so had to obey.

"This stuff, you say, is what?" queried Piano. "And what will it do?"

"It's thermit," explained Graham, naming its chemical constituents in a few words.

"As for what it'll do—well—I'll show you in a minute."

He reached over onto the table, took up a large flat paper-weight which Dave had made out of a piece of some long-since shattered safe and set it in front of Piano. Then he spilled from the box about a tablespoonful of the metallic powder onto the middle of the piece of steel. He took from his pocket a bit of tape such as photographers use for igniting flashlights, and poked one end of it into the little pile.

"Now we'll see if the scientists are right or wrong," said he, fishing for a match. "Of course, even if it works right, it won't help us get into the Security. No; it's for use inside. But we'll get in, all right enough. It all came to me—"

"Hold on!" cried Piano. "One thing at a time. Match, eh? Here." He struck one. "Shall I light it?"

"Go on, go on!" exclaimed Graham, more and more agitated. "Let her go!"

Piano calmly touched the flame to the end of the tape. The magnesium flared; then, suddenly, the powder took fire.

Dazzlingly it burned; with a slight crackling sound, yet almost without smoke. The heat that glared out at them made both men shrink back and shield their eyes. They saw the steel redden, whiten, then go soft and liquid, boil up and disappear. The powder suddenly went out; where it had been, their scorched sight beheld a clean-edged opening down through the plate. But they had little time to stare at it, for a smell of scorching wood came to their nostrils. Then little tongues of flame began to flicker up from around the edges of the steel.

"Quick! Water!" cried Piano. "These papers—they'll all be going in a minute!"

He beat at the fire with his naked hands, while Graham rushed water in a pitcher. With a tremendous hissing and smoking the fire was put out and the piece of steel cooled down. But the table was an ugly sight, its varnish ruined, a deep charred patch burned deep down into the wood.

"Oi! Oi! Vat vill Hixer Adam say?" exclaimed Piano with mock grief. Then, in his own voice: "No matter! What's a table, what are ten hundred tables, 'side of this?"

He whacked Graham enthusiastically on the back. Graham coughed and blinked.

"All right, eh?" cried he. "She'll do business?"

"Will she?" jubilated Piano. "Oh my!—Switch, you're one genius, no mistake!" He seized the younger man by the hand and wrung it till he winced. "Sure as guns!" he ejaculated. "Sure as guns—Krupps! Siege guns! Mortars!"

Graham laughed.

"Who's excited now?" he jibed maliciously. "My dear fellow, sit down, will you? Light your pipe, and listen. If I didn't know what a well-balanced head—"

"There, now, that's enough!" said Piano, quieting down. "Here, just let me brush some of this dirt off and lay a paper over it, so Adam won't see it all at once, and I'm with you. Now then?"

He sat down. Graham pocketed the remainder of the thermit and sat down too.

"My idea," he began, "in its main general outlines, is like this—"

Piano leaned forward, listening intently, from time to time putting in a word or a suggestion, but for the most part letting Graham do all the talking.

For an hour they held council. Dave's arrival put an end to it; but already the plan was well matured.

Nothing remained now, they both felt, but to undertake the practical carrying out of Graham's ingenious inspiration.

CHAPTER XVIII.

Preparation.

GRAHAM went down-town to Spring Street next morning, and dropped in at the office of the warehouse. He asked the clerk to quote him rates on the storage of two large crates of porcelain.

"Not in a vault, you understand of course," he said. "Merely in one of your storage rooms. One dollar a month, you say? For both?"

"Per crate," answered the clerk, showing his pen behind his ear and looking out with mild, colorless eyes through the grating.

"Too high," objected Graham. "I can get a rate of half that in the United Safety."

"Yes, but we guarantee against fire, water, burglars, and breakage. That amounts, you see, to insurance as well as storage."

"Oh, in that case," Graham returned, "it's quite satisfactory. It'll do. The goods will be sent in some time next Thursday."

The clerk nodded, took down a large

flat book interleaved with carbon paper, and, asking a few questions, filled out the necessary contract.

He passed it out to Graham, original and copy. Graham read it over carefully, then signed in a bold, firm hand: "H. K. Everett."

"Payable in advance," suggested the clerk. "One month, at least."

"Here's for three," said Graham. He shoved in six dollars and the copy, folded up and pocketed the original, and took his leave. The clerk, suspecting nothing, went back to his ledger, and thought no more of the incident, which was like a dozen or a score of others in his daily experience.

Piano, meanwhile, had been hiring a small, disused carpenter shop on East Eighty-Ninth Street, close to the river. Neither he nor Graham dared trust the making of the packing-cases to any hands but theirs. The very special manner of construction, they felt, must attract attention and might arouse suspicious interest.

Next day, Tuesday, garbed like workmen, they took possession of the shop—a dingy, cobwebby old place, stored with considerable lumber and sufficient tools for their purpose. They had already told Dave that "something was doing," though just what, they said, could not be for the present divulged, and had enlisted his services. Dave was a good driver, they knew. He could attend to the trucking of the cases, when ready, from Eighty-Ninth Street to Spring Street.

Tuesday afternoon they started making the cases. Tumbler was out of town; Adam was engaged in carrying on some further experiments with the thermit, which had so delighted and astounded him that he had quite forgotten to complain about the scorched table or even his "History of the Renaissance," that had been singed. Everything favored. The two conspirators were jubilant.

"I tell you, Switch," said Piano as he peeled his coat, rolled up his sleeves and began hauling out planks from the pile at the back of the shop. "I tell you, this taste of honest labor does me good. It's been a long time since I've had a saw or a plane in my hands. Quite an agreeable change from a double-purchase wrench, a 'drag' or a 'puffing-rod!' You think four feet by five will be big enough?"

"Maybe for one of them, for yours," answered Graham. "We'd better make

mine about five by six. I'm pretty long, you know."

"Long you are, bo," assented the other, "on brains as well as carcass. Suit yourself." Graham thought a tinge of pique had crept into Piano's voice, but he could not be sure. Piano went on, casually enough: "We'd better have plenty of room to turn around in. Rather too much than too little. We'll have a pretty long while, off and on, to spend inside 'em. I don't know what you're planning, but as for me, I take a little lunch and something wet. It'll be a mighty tedious wait."

Thus talking, planning the last details of the attack, they set to work on the boxes. By mid-afternoon they had constructed two large and solid cases, of ample size. Loosely built, with considerable cracks between the boards, and lined with gunny-sacking, there would be no danger of suffocation. Inside of each case they nailed a soap-box, to serve as a seat and also as a storage place for tools, provisions, and the like.

The lids they made in such a fashion as to give the appearance of being solidly nailed down. This they accomplished by using nails cut off to the length of half an inch, and by fitting hinges to the covers, inside. These could be readily screwed fast or unscrewed from within.

"There," said Graham at last, straightening up and wiping the sweat from his forehead, "I guess they'll do now!"

"Do? Well, rather! Beauties, aren't they? If Ali Baba and his mob had only thought of something like this, instead of their dinky old wine-jars, things might have come out differently for them, eh? Now, you just mark 'em, Switch, and they're done. I'll let you do the brush-work—it's in your line!"

He laughed at the innuendo. Graham smiled, too, as with a brush and a pot of marking-ink he proceeded to give the final air of verisimilitude.

When he had finished his work, each case was lettered in strictly professional style:

BAILEY-THOMPSON Co.,
NEWCASTLE, PA.

This Side Up. Fragile.
USE NO HOOKS!

They both stood back, surveyed the effect and pronounced it good.

"Nothing more to do, now," said Graham with a sigh of satisfaction. "Nothing but to get some more of the powder and a little clay, then turn ourselves into freight and sit steady for results. This thing is on the knees of the gods now, for fair. If—"

"If it doesn't slip off and smash, things will be didding right away quick," Piano took up his speech. "Well, come on, bo. It's getting late. We ought to be getting back home. What do you say if we take in a good show, to-night, by way of celebration? I'm dog-tired. A workingman's life is the life for me—not!"

Graham smiled absent-mindedly. His thoughts were all in the near future, now so heavy with possibilities of utter failure, of capture, of renewed imprisonment and suffering; or of dazzling success, the realization of all his hopes, justification, and perfect happiness—which was it to be?

They padlocked the old shop door, and, like the weary, toil-stained men they were, slowly started through the fading light for home.

Piano talked more than was his wont, all the way; but Graham was unusually silent. The close approach of the supreme trial weighed upon his soul.

"How will this end?" he thought, with alternating hope and fear. "Merciful Heaven, if I only knew—if I could only see!"

CHAPTER XIX.

At the Goal.

SO perfect was Dave's make-up as a teamster, with overalls, rough cap, clay pipe, and all, that the cleverest fly-cop on the Slinkerton force could not have suspected either him or the true nature of the two big crates in the truck which he drove slowly down Second Avenue a little after four o'clock that Thursday afternoon.

Without mishap of any kind he piloted his pair of Percherons along the streams of traffic. Now and then he pulled up for a car, a blockade, or the raised white glove of a "harness-bull." Once or twice he vituperated a careless driver. He smoked, lolled with bent back on the broad leathern strap that served for a seat, and played his whole part to a nicety. Safely he brought his team into Spring Street, to the warehouse, and backed up at the freight-elevator.

It was just before the closing hour when he arrived.

"Aw, come on, come on, you!" growled the elevator-man impatiently. "What d'you t'ink dis is? An all-night bank?"

Dave only removed his cap, took from it a piece of paper, read it slowly—scratching his head the while—and then looked up half stupidly.

"Security Storage," said he. "Two cases of crock'ry, sixth floor. Here." And he extended the contract to the ill-humored employee.

"All right, shove 'em in!" exclaimed the latter. "Gee, but you're the original Bone-head Barry, though!"

Dave grinned.

"Gimme a hand?" he answered, climbing up into the truck. "Easy, now—e-e-easy! Hey, wot you doin'? Can't you read? Naw, you don't! Dey goes in right-side up, or dey don't go at all, see? An' you don't use dat hook, neither!"

The elevator-man swore.

"Hey, Bill!" he shouted into the cavernous dark behind him. "Come git ahold, here; will you?"

Bill appeared. The three men carried first one case, then the other, onto the broad floor of the elevator.

"All right, now," said Bill.

Dave extended the contract to him. Bill scribbled a couple of crude initials. Dave put the paper back in his cap, straddled into his seat, picked up the reins, and with an indifferent cluck-cluck! drove away.

As he did so the elevator vanished slowly upward, and the big, iron-bound doors swung shut.

Toward midnight faint signs of life began to manifest themselves in the larger box. There, in the darkness of the storage-room, a slight sound became audible, hardly more than the nibbling of a mouse. It came from the slow, gentle turning of the screws that held the hinges. The screws did not squeak, for Graham had rubbed them with soap before having driven them home.

One by one he withdrew them. Piano, in the other case, was also now at work. Hardly had Graham finished, and lifted his cover, when the lid of the other box rose also.

"S-s-s-st!" came an all but inaudible signal. It was answered. Then out crawled Graham.

He stood there a minute, listening intent-

ly. Not a sign, not a sound to indicate danger. Something clicked, and the bright little beam of the electric flash fell on Piano, half-way out of his hiding-place.

"Douse it!" whispered Piano. The light faded.

By sense of touch alone they took from the cases all the material they would need for the break—the keister with the clay, the sectional jimmy, the package of thermit, the magnesium tape, the revolvers, and the skeleton-key.

"Now let the covers down," said Graham. "So! That's right! If anybody should happen to butt in here, everything must look all right."

"Correct," answered Piano. "With a little luck, we'll be back inside now in less than an hour. Half an hour, maybe. Then nothing to do but wait for morning. Dave won't fail us! He'll come back with his story of a mistake being made—he'll take us out of limbo, all right enough, never you fear!"

As he spoke, Graham was already moving on noiseless, felt-shod feet toward the door, which even by the momentary flicker of the light he had made out. Piano, carrying the satchel, followed him.

Strangely enough, Graham was now cooler than his comrade. Although anticipation of this moment had set his nerves a-tingle and keyed up his pulse, now that the actual time had come, now that he was within the fortress, on the same floor with Dill's storage-vault, he found himself as well at ease as though sitting quietly in the flat, reading a paper. It had been the same at the time of his trial. The verdict had overwhelmed him; the sentence itself had left him unmoved. Calmly he played the light over the door.

"Nothing hard about this," judged he. "Only a simple lock; no combination."

"No need of any for a room like this," added Piano, getting out the skeleton-key. "They aren't wasting 'em on chinaware and such. But just wait till we strike the other place, down the corridor."

He fitted the key to the lock, manipulated it a moment without noise, then turned it. The bolt slid.

"Cinch!" breathed Piano, as he picked up the tool-satchel.

Graham extinguished the light, soundlessly opened the door, stuck his head out into the hallway, and listened.

Nothing. No sounds of any sort came to

him; no echoing footfall, no gleam; nothing save silence absolute, blackness so dense that the hand was utterly invisible six inches from the face.

"Come on!" he indicated by a tug at Piano's sleeve. Together they slipped out into the tiled corridor. Graham shut the door behind them, lest any watchman find it open and investigate.

Though neither of them had ever so much as been inside the vast building before, they both knew the way as accurately as though it had been their home for years. Piano's previous consultation of the architect's plans—a consultation made in the guise of a Chicago contractor—had put them in possession of every detail and every distance.

"Forty-seven feet straight ahead," Graham remembered, as in complete silence they paced down the hallway, "then the turn to the right. Twenty-four feet brings us to the open space in front of the elevators that communicate with the courtyard. Cross that, and go straight on, same corridor, thirty-six feet. Second door to the right. Then another turn, and first door, left."

Almost as quickly as he had thought it, they reached the first turn. Along the branch hall they passed, almost unbreathing, guided by their sense of touch against the reenforced concrete walls. Now they were hard by the elevators. "A pipe!" whispered Piano with jubilation.

All at once he swore, under his breath yet angrily, stooped, and rubbed his shin, which had been "barked" by some hard substance. Came a slide and rattle; a box fell noisily to the floor. Some late consignment had been left by the warehousemen, standing in front of the elevators. Into it Piano had run.

"Now for trouble!" he said. "Ought to have used the light more, darn the luck!"

Graham pressed the button. By the faint gleam they saw the elevator-doors and a pile of crates and barrels that more than half filled the hallway.

Suddenly, from somewhere, sounded a footstep. Then, at the juncture of the branch and the main corridors, a very dim light began to show.

"S-h-h-h! Quick! *There!*" Graham breathed, pointing over beyond the pile. An instant later, revolvers in hand, he and Piano were concealed.

None too soon, for now the footsteps sounded nearer; then the light strengthened.

It shone out suddenly as a watchman came around the corner. They could see the unsteady lantern-beams dancing along the fire-brick ceiling.

Both of them held their breath. The watchman, a keen-looking, gray-haired fellow in jeans, stood still for a long minute, listening. He swung his lantern over the pile of freight. One sound, one slightest movement, would have betrayed them. Graham's finger tautened on the trigger.

For the first time in his life he felt the killing impulse. Not the wrong that Dill had done him, not even the many and grievous provocations given him in the penitentiary, had ever stirred this feeling as now. The watchman's life hung in the balance. Never had he been nearer death than just that moment as he stood there, half suspicious, half angry, surveying the consignment.

Then he saw the box that had fallen. It explained, or seemed to, the noise that he had heard. He set his lantern down, shoved the box back out of the way, grumbled a bit, and swore. Then, with some half-muttered word about "Reportin' that Dugan to the boss in the marnin', sure!" he took a final look and departed. His light faded and died. His footsteps echoed, diminished, ceased. Silence reigned again—silence and the darkness.

Graham and Piano did not move or speak. They crouched there a full five minutes before they so much as dared draw a natural breath. Who could tell but what the watchman might still be listening? But what this might be a ruse on his part to detect the true cause of the trouble? No novices, they, to be so easily entrapped, if trap there were.

But, as the time lengthened and no sound reached them, they gained confidence once more. Piano nudged his comrade, and cautiously stood up. Graham followed. They pocketed their "smoking-irons." Presently they were sliding like wraiths down the corridor beyond the elevators.

As they went, Graham kept his hand trailing along the wall to the right. He counted the doors: "One! Two!" His pace slackened even more. They reached the corner and turned again.

"Here!" said he, taking Piano by the coat.

Both stopped. Piano set down the satchel, knelt, and opened it. Graham threw the light on the iron door that was all which now separated him from Dill's place of fan-

ried security. He saw the combination; then, above it, a second lock.

Like many another vault, it had two fastenings, one which could be opened only by an employee, one by the tenant, thus absolutely shutting out any unauthorized opening of the door—"Or so they think!" reflected Graham, smiling satirically. "Well, maybe we'll show them a new wrinkle, eh?"

Already he was at work. Piano handed him the clay. He took a lump of it, stuck it against the door immediately below the combination, and fashioned it quickly into a sort of shallow trough. The same operation he repeated for the upper lock. The rest of the clay he dropped back into the bag.

Taking the package of thermit, he poured into both cups of clay a quantity of the marvelous compound. He inserted the bits of tape, which had already been cut to the right length.

"Stand back, now!" he whispered to Piano.

Both men waited a moment, looking, listening.

"Go on—set her off!" said Piano.

A match flared in the black. By its wavering light their faces became visible, set and eager, with eyes the pupils of which were unnaturally dilated, like a cat's eyes at night. Piano blinked, but Graham's gaze was steady as his hand.

He touched the match to one tape, then the other. There flashed a quick and blinding radiance, followed by the blue and slightly crackling glare of the thermit. Then to the floor dripped, splashing, an ardent rain of molten steel.

Piano looked anxiously over his shoulder. But Graham, merely smiling, stood there and watched the wondrous flame eat into the door. Slight chance, he knew, that the light should be twice or thrice reflected so as to reach the main corridor. With incredible rapidity the combination fused, lost form, ran down, and dribbled along the plates of steel. Graham threw in another handful of the stuff; the metal rain increased. Then, where the lock had been, a tiny hole appeared.

It widened to a white-hot gap. Graham closed his eyes, which felt as though seared. A green light seemed to fill them. He stood there, listening to the coruscating hiss of the thermit. No sweeter music in all his life had ever reached his ears.

"All right—all right!" whispered Piano.

Graham looked again. The stuff had burned itself out. Now nothing was visible but just two glowing apertures, like red-hot windows in the dark.

"When she cools a bit!" said Graham.

Piano tiptoed to the turn, looked and listened, perceived no sign of danger, and came back.

"Oh, but you're the goods, bo!" breathed he in admiration.

"S-h-h-h! The jimmy now!" Graham answered, oblivious to all but the immediate task before them.

A few strong, skilful twists broke down the last barriers of resistance. The door swung inward.

Piano seized the bag. They both entered the room. Graham pushed the door shut behind him.

"At last!" he said coldly.

CHAPTER XX.

The Finding—And After.

HE stood motionless for a second or two, flashing the electric beam here, there, getting his bearings. He sniffed the close and fetid air of the long-closed place as though it had been perfume. His quick glance showed him the situation of things.

The room he saw was very small—hardly six feet by eight. One side was banked up with boxes and packing-cases, probably containing the old man's most valuable books or art treasures. Some large flat objects, wrapped in sacking, stood against the wall directly opposite the door—pictures, no doubt. Graham turned impatiently from these.

"Well?" queried he. "Nothing but junk here, after all!"

"There!" answered Piano, pointing toward the right.

Graham turned the light that way. It flicked spots of brilliance from metal.

Graham saw a safe-door, apparently built solidly into the wall itself.

"There she is, Switch!" said Piano exultantly. "Now for business!"

Graham stepped over to the safe. Together he and Piano quickly inspected it. Graham smiled.

"I guess we sha'n't have to waste any more good ammunition on that!" decided he. "Just you keep watch a minute, and I'll see what I can do with this pretty little gopher."

Piano took the light from him. Graham knelt before the combination. Lovingly he laid his ear against the steel plates. Like a maestro touching a long-familiar instrument, he delicately took hold with his sensitive, artistic fingers upon the knob of the device.

He turned it slowly, carefully, listening all the while. Thrice round he sent it, then thrice back, noting each tiny sound. Forgotten seemed to be the perilous situation, forgotten the presence of his companion, forgotten even the object of his quest. All his attention, keen and absolute, centered upon the minute, fine, hardly perceptible little indications there within the combination.

At last he nodded.

"I've got it," he announced.

He spun the knob, stopped it at 85, drew it back to 40, then whirled it twice round. To 20 he brought it.

"Sixty, now, and—you see?"

The action suited the words. The combination clicked. Graham pulled down the handle, tugged a little at the door, and swung it wide.

Piano said nothing. His eyes narrowed, though, as he stood looking down at Graham's broad back. In them that strange look had appeared once more—the look that Graham had sometimes noticed there, as though the man, Graham's one-time teacher, harbored some secret jealousy or some more poignant feeling. But of this Graham knew nothing; it passed, too, for the moment, in Piano's growing eagerness.

"One more, and we're in," remarked Graham, tapping the smaller inside door.

"Don't waste time figuring on that," said Piano. "It's nothing but an A B C lock. Here!"

He took the light in his left hand. With his right he drew from the satchel the skeleton-key. Graham noticed that the key shook a little as Piano fitted it into the lock. He wondered momentarily at this, but had no time to give it more than passing thought, for already the inner door was giving way.

Piano dropped the key back into the bag and pulled the door. It yielded. Dill's secret hiding-place stood open wide at last before Graham's searching eyes!

For a minute he did not see the thing he sought. In the drawer lay many papers. The sealed packet that Piano had told him about was hard to distinguish. He knelt there, head bent slightly forward, hands

eager to grasp, a singular expression on his fine, intelligent face, the color a trifle heightened in his cheeks.

"Eh? Don't see it?" asked Piano breathlessly.

For all answer Graham began taking out the contents of the drawer.

There were deeds, mortgages, bonds, stocks—ah! what was *that*? A bulky package wrapped in manila paper and tied with lawyers' tape, the knots of which lay buried under seals of dark-red wax!

Graham laughed a slight, cynical laugh. If Piano had expected him to taste the copper of excitement, to jump up, to indulge in jubilation, he was disappointed. With hardly more emotion than as if finding a bunch of newspaper clippings, Graham took back his own. Took back his property, the justification of all that he had done; his proof, the thing which was to give him once more all that was to him far more precious, more dear, than life itself.

"Justice!" Piano heard him say. Only that one word, as he slid the bundle into his breast-pocket; then, without rising from his knees, began carefully laying the other papers back into the drawer again.

Piano stared at him, amazed. The yegg's jaw dropped. He frowned with astonished displeasure.

"Say, Switch!" he whispered in an eager, trembling voice.

"Well?"

"What—what the devil—"

"You mean—"

"Those papers! Securities of all kinds! Worth—"

"I don't know that it's any particular concern of mine what they're worth, is it?" answered Graham, closing the drawer and making as though to swing the outer safe-door shut.

Piano laid a hand on his arm, staying it. "Maybe not. Maybe *you* don't care. *I* do!"

"Why?"

"Why? There's swag to the value of half a million, perhaps, and you—you ask why? What are you handing me?"

Piano could hardly articulate, so great had become his excitement and indignation. Graham only laughed again.

"So that's what you let me think this thing out for, is it?" he questioned. "That's why you let me solve a problem that was too hard for you? Not for the sake of justice—not for the right of the thing—only

for a haul? Took me in, taught me, fraternized with me—" He broke short off.

Piano shoved his face close up to Graham's. The rays of the flash-lamp, reflected from the wall of glazed brick, made only a dim twilight; yet there was light enough for Graham to see how ugly the other's expression had become, how bitter, angry, and covetous.

It was as though all the jealousies, the half-perceived antagonisms of the past months, had suddenly crystallized, had now in a second been made visible.

"Hop-talk!" sneered Piano. "Trying to play the parson all of a sudden, now, are you? Think I risked my skin for nothing but to see you get yours? Where do I fit?"

"Oh, if it's money that's bothering you, I guess I'll have enough before long so that I can pay you for your time!" Graham's tone was so caustic and so stinging that Piano reddened.

"Drop that!" he answered. "It isn't yours I'm after. It's the rest, there, inside. I want it, you understand?"

"Sorry. Because you can't have it—you see."

"Can't, eh?" and Piano thrust Graham's arm aside. "Why can't I?"

"Largely because I say so. Not one dollar of it. Not one cent. You hear. I didn't plan this crush for loot. Planned it for nothing but—"

"I know all about that. But you and I are two different persons. You've got yours; now I'm going to get mine. Stand off!"

"No!"

"Switch," said Piano, holding his rage with an effort, "see here. You'll let me at that gopher, or I think there'll be a muss in just about one minute."

"I think so, too," answered Graham cheerfully. "Half a minute, maybe."

Piano, his anger now wholly out of hand, cursed Graham and struck at him. Graham caught his wrist in a grip like that of a vise, and held it.

"Fool!" he exclaimed. "What kind of a place is this to raise a row in?"

"Thick-walled enough, I guess, so nobody'll butt in!" panted the yegg. "You going to let me at that box?"

"No!"

Piano threw a muscular leg round Graham's, and tried to trip him.

They clenched, staggered, stumbled over the valise, and fell, with Piano on top.

The light went out. In the utter dark,

Graham felt the man's hands striving to get a hold on his throat.

But Piano, in attacking him, had reckoned without his host. Graham, though ten or fifteen pounds lighter, was twice the athlete that Piano even in his best days had ever been.

The yegg's fingers could not find a hold. With one arm Graham guarded his throat, and with the other dealt stunning blows upon the man's head and neck. His fist landed savagely.

Piano grunted, trying in vain to guard, and at the same time to inflict some damage. The tide of battle turned.

With a supreme effort Graham broke Piano's grip, flung him aside, and staggered up. Piano clutched at him. Graham, desperate, kicked at him full force—the only time in his whole life that he had been forced by gutter-fighting methods to reply in kind.

He felt his boot strike crushingly, heard a cry, got free, and leaped away.

Half dazed by the sudden attack, the darkness, and the violence of the struggle, he stood there a moment pulling himself together. He heard Piano's labored breath, heard the man groan and swear; then, although he could see nothing, knew by the sounds that his opponent was getting up again.

"Well! Had enough?" Graham gasped.

Piano's only answer was a growl. Inspiration flashed to Graham. He dropped to his knees, felt here and there with his hands gropingly, found the valise, then the electric lamp.

"Curse you!" he heard Piano say. "What are you up to now? Wait till I get a—"

The voice broke off.

Graham heard a sound he knew right well—the click of a revolver-hammer going up.

Even then, singularly enough, he felt no fear, but rather a wild sort of exultation, a keen joy in battle. With no light to guide Piano's aim, the chances, he knew, were good for escape, even should the now maddened man venture to shoot. Guided by Piano's breathing, Graham crawled away, crouching, and on one hand. The other hand clutched to his breast the satchel, into which he had slipped the flash-lamp, and which contained the skeleton-key.

"Stick and slug!" He remembered the motto; but now, when his comrade had bro-

ken the pact, had set upon him, and was even threatening his life, he felt all the bonds of the underworld code were utterly severed.

Answering no word, then, but reaching the safe-door, he pushed it and spun the knob.

As he did so, Piano, wholly out of the bounds of caution with rage, fired.

The report almost deafened Graham in that small and confined space. The stab of flame from the heavy-calibered pistol singed his hair. By its instantaneous light he got a glimpse of Piano, crouched between him and the door leading into the hall.

Before Piano had had time to pull trigger again, Graham had rushed in on him, smitten him furiously upon the head with the heavy tool-bag, and floored him.

Then, waiting for nothing else, he sprang to the exit, seized the still warm door, and pulled it open.

Somewhere in the great dark labyrinth of the warehouse he heard steps echoing; then a bell rang. His heart leaped. The alarm, he knew, had been given.

Yet even then, when every second was more precious than gold, he could not desert his former comrade without a last appeal.

He turned back, and, peering into the gloom, exclaimed:

"They're on! Come, hike! Here—the door's here! I'll wait for you!"

No answer save a snarl and the click of the revolver again.

Graham, realizing at last the futility of trying to reason with the infuriated yegg, said: "Well, good-by then. On your own head be it!"

He drew the iron door shut. Down the corridor he silently ran.

As he crossed the transverse hall where the elevators were, he saw lights at its further end—lights, and three men.

He heard a shout: "*There* he goes!"

Graham knew that he had been seen, that he was trapped there in the dark mazes of a place stronger, more formidable, than a penitentiary itself.

CHAPTER XXI.

The Leap.

ACROSS his mind flashed, clearly as though it had been outlined in flame, the plan of the warehouse which he had so often and so carefully studied.

As he ran along the dark corridor, with the sounds of pursuit growing rapidly louder, nearer, he saw the exact situation. The hall, he knew, extended some forty feet toward the rear of the building; then a turn to the left would bring him to a series of stairways that connected all the floors.

Up these stairs, if he could only throw his pursuers off the trail, he could reach the top story. The skylights, he believed, offered at least the chance of getting out onto the roof. Once there—He did not know. Yet, since that was the only possible avenue of escape, he bent all his energies upon it.

Just before the watchmen debouched at a run into the hallway where he was, he reached the turn.

A barred window, twenty feet away, let in a few filtering rays of light. Graham's eyes, accustomed now to the gloom, vaguely perceived the iron stairway.

As with instinctive knowledge he felt that his pursuers would all but inevitably conclude that he had gone *up*, if they did not see him when they arrived. Therefore, following the dictates of that instinct rather than of his reason, he hastily and noiselessly slipped down the stair beneath the ascending one.

Hardly had he reached the floor below, when he heard excited voices there above him.

"Where is he? Which way? Up, of course, you solid ivory!"

He recognized one of the voices as that of the watchman who had threatened to report Dugan "*in the marnin*." In spite of his imminent peril and throbbing heart, he had to smile.

"Guess I sized up your mentality, all right enough, my friends," thought he.

A moment he waited; then, sure enough, feet sounded on the upward stair.

Graham kept utterly still; all his senses seemed as though merged and centered just in the one sense of hearing. To him came disjointed fragments of speech as the men, staying together through an irresistible feeling of dread, searched the corridors above.

They came back to the stairway, puzzled. He heard one of them say: "Well, he can't git out, nohow!" Another answered: "Wait, now, till I ring up th' rest of 'em. We'll have the bunch here in no time. Oh, *he* can't dodge us long!"

Somewhere in the stillness an electric bell

trilled. Then, on the stairs above he heard the men's feet climbing higher still.

A daring ruse occurred to Graham. He issued from the corner where he had taken refuge, and as the men went on up-stairs he followed them.

The windows all up and down the stairway helped him greatly. He neither hesitated nor stumbled; he made no slightest sound. Yet steadily and swiftly he mounted the stairs in the gloom, blessing the thick felt-sole shoes he wore.

On the sixth floor he paused—the floor which but a minute or two past he had quitted, and where the watchmen had so recently stood consulting. To his mind came the idea of seeking refuge among the piles of freight out by the elevators; but this plan he at once abandoned. Those boxes, he knew, could at best give him but very brief respite. If he hid there, he must surely be caught.

In this momentous game of hide-and-seek, upon which all his future, all his life, depended, he must at all hazards keep clear and free of entanglements. Even a dozen watchmen, he felt certain, could not suffice to entrap him in those many, dark, and winding hallways. If he could only outwit them until he could reach the top floor—but after that, who could say? He set his jaw and vowed that once there, nothing should stop him. Forgotten was his scorched head, where Piano's shot had grazed.

Now the watchmen were climbing again. Again he followed. This brought him to the seventh floor, while they were poking about on the eighth. But now he heard sounds below him. Reinforcements were coming! Suddenly a shot cracked. Sounds of a scuffle burst out.

Up from below rose a voice of command: "You big stiffs. Here, you, what you doin'? We got him!" Shouts followed; came another shot, a howl, an oath.

Graham, fully realizing what had happened, shrank back into the hallway corresponding to the one leading down there below, from the vault to the stairs.

He heard feet running rapidly down, clattering heavily in confusion. The watchmen reached the floor where he was concealed. For a moment his heart stopped still. Not five yards from him the searchers were. Suppose they should happen to come through the passage where he stood all open and defenseless? But, no—on they went, on and down the stairs again.

Graham realized with a thrill of exultation that now all the men were below him! Now nothing intervened between him and the top floor. Thanks to the stupidity of the men themselves, and the diversion caused by their finding Piano, his way stood clear!

"Dom funny how we missed 'im—how he got down there ag'in when I seen him wid me own eyes runnin' up!" he heard one of the descending watchmen exclaim. He did not wait for more, but quickly stole away up, ever up, still with the precious packet safely in his keeping, still with the satchel gripped in his right hand. His pistol he did not draw, but kept that for extreme emergencies.

It took him but a few minutes to attain the upper story of the tremendous building. As he went, the light, though still very dim, kept growing a bit stronger; it served him passably well. Inasmuch as he did not yet dare to use the electric flash, he thanked fate that the warehouse windows opening on the courtyard were not shuttered as were those that overlooked the street.

On the top floor he stood still, listening. His heart pounded with the exertion of the long, fast climb, and with the excitement of the chase. Far down below, the sounds of struggle had subsided. Piano, he knew, was either dead or had been made a prisoner. The watchmen by now, he felt positive, must have recognized their mistake; must know that there had been two intruders and that one of these had succeeded in giving them the slip.

As a matter of fact, it seemed to him they were coming up again, some of them; though every sound in that echoing, maze-like place, was so broken, enlarged, and distorted that he found it difficult to tell just what was going on.

"At any rate, out's the word for me!" said he to himself.

He hurried along the hallway skirting the courtyard, looking for one of the skylights that Piano had assured him were there—but all in vain. Cautiously, as he went, he raised the flash-lamp high in air and pressed the button, throwing the little silvery beam up against the ceiling of fire-brick. No skylight! No trap-door! No opening of any kind!

"What?" thought Graham. "Penned in, after all I've been through? After all I've done, and suffered—just at the very last of it, just within an ace of going free, shall I be caged up here like a rat and taken by

those idiots? By God, I won't! Not while I have life!"

He reached a turning to the right, took it, and sped silently along the west side of the court.

At his left he vaguely saw a row of doors, with here and there the gaping mouth of a hallway; at his right, windows that looked out into the yard, twelve stories below—windows all heavily barred.

He stopped, peered through into the night, and pondered. Where, thought he, were the skylights that Piano had reported? He did not know, nor could he, that the architects' plan had been changed in that respect. Puzzled and confused, he stood there to breathe, to rest an instant. He pressed a hand to the singed spot on his head.

A light, below him and off to the right, drew his attention. Through the windows on the south side of the court he saw a lantern swinging upward; saw legs moving up a flight of stairs.

"After me, again!" he realized. Far away echoed the sound of footsteps climbing, climbing.

Desperate, he ran forward once more. Then he stopped.

"It's no use," said he. "This game of tag, with me for It, can't last long. They'll get me sure, this way—if not now, then later. It's a losing fight. I've got to make a break!"

"If I die, doing it, that's all right, too. That's a thousand times better than to be taken, robbed of everything I've waited and suffered and labored for, and sent back to 'stive!' Better, ten thousand times!"

Again he peered through a window.

Above it, perhaps three feet from the top of its bars, projected a broad cornice. Once there, he hoped, he might be able to swing himself up onto the roof, and from the roof what possibilities of escape might not exist?

He scrutinized the window-pane, vaguely seen by the infiltrating dim light that always hangs above a city.

"H-m-m-m! Wire-glass!" said he. "That's a job in itself!"

Saying no further word, he opened the satchel, took out the jimmy, the remainder of the powder and tape, and set them on the sill.

With a quick, firm blow he struck the jimmy through the glass, and one by one began twisting the wires off. The glass, held by the wires, fell only in small pieces.

Graham shoved these out, so that they fell in the court, a hundred and twenty feet below. The slight noise he made could hardly, he felt certain, reach the ascending watchmen way round on the other side of the great warehouse.

In less than two minutes he had broken the wires all about the pane, had lifted out the glass and laid it noiselessly on the floor beside the satchel.

There remained, then, only the bars.

At the base of two of these he dumped all the remaining thermit and hastily set it off. The stuff, so potent with steel, ate the mere wrought-iron like so much wood. Presently Graham saw that the bars were melted clean through. With the jimmy he pried them aside, then bent them sharply up and out of the way.

"Now!" said he.

He thrust his head far out and looked down. He could see nothing, there below, save a black, fathomless gulf. The courtyard was wholly lost in shadow. Above, the cornice made a dark line across the gray night-sky. A desperate venture indeed, he realized, to try and reach it, to pull himself up and over it; but nothing else remained.

"It's that or—living death!" thought he. "Now, then!"

Hesitating no moment, he pressed his hand to his breast, assuring himself that the sealed package still rested safely in his pocket, then lightly climbed to the sill.

Hark! What was that? A cry, far down the corridor—the flash of a lantern—the crack of a pistol-shot! A bullet snarled past him. "There he goes! Quick, you!" he heard a voice shout.

Graham laughed wildly, then with the agility of an acrobat climbed through the opening he had made.

He turned, clinging to the bars, and quickly scaled the tall window.

Now he was at the top, outside the building, with nothing below him save a sheer drop into the darkness. Twining his legs around the bars, he reached outward for the edge of the cornice. Just a little too far for both hands to reach! Strain as he might, he could not compass it.

"Here! Here! We got him!" cried somebody, inside. Graham heard feet running, full tilt.

Desperate, filled with the strange abnormal strength that comes to men in time of supreme peril, he grappled a bar with one

hand, raised himself, loosened the grip of his legs, and stood there above the chasm, one foot resting on a cross-bar.

With a desperate effort he managed to get his right hand up and over the edge of the eaves.

The fingers clutched and tightened.

Graham let go with his left hand. He swung clear. For a moment he hung there by one hand alone, in mid air.

A dark form appeared at the smashed window.

"Hey! Quick, here!" screamed the pursuer.

Graham kicked at him, striking him full in the face and blinding him, as he flung up the other hand and caught the eaves with that also.

His biceps tightened. The big muscles coiled and swelled. Graham pulled himself, inch by inch, up, up, till now at last he could get one knee, one foot up into the metal gutter.

Summoning his last ounce of strength he held, so, for a second; then with his right hand clamped hold of the graveled edge of the roof itself.

A moment later he had hauled himself, panting, spent and dizzy, up onto the flat roof right at the very lip of the abyss.

The space of ten rapid heart-beats, perhaps, he lay there while below him rapidly swelled the chorus of disappointed execrations, of threats and confused commands. Then away from the cañon-like emptiness he crawled on hands and knees up a slight rise over tar and gravel.

Safe for the instant, he scrambled to his feet and looked around him.

Dimly, at the low crest of the roof, he made out a cluster of chimney-stacks and ventilators. To right, a housing of some sort, possibly containing the wheels and top framework of an elevator. To left, a dull upthrow of light from Spring Street at the front of the warehouse.

Not that way, he knew, lay escape. He turned to the right, ran rapidly along the pebbles, reached the corner of the court and turned again to eastward.

Ahead of him he vaguely saw more chimneys. For a moment he thought of crouching behind them, of hiding there like a hunted animal at bay; but that idea he instantly put from him. It could not serve. The pursuers knew now where he was. Up some stair or ladder he felt certain they would immediately be after him again—half a dozen

of them, maybe more—armed, ready for battle, ready to kill.

"I've got to get down off of here—down—some way!" panted Graham as he ran.

His heart leaped painfully; his breath seemed to choke and stifle him. Like a horrible dream, a nightmare, the whole thing seemed—a nightmare from which he knew he could not wake. On his forehead he felt the sweat starting copiously. A sudden weakness came over him, and he began to tremble. He pulled up short.

"Come, come, boy!" he exclaimed. "This won't ever do!" He tried to get himself in hand, to think a moment, to plan.

A noise on the other side of the building, on the roof across the gaping black square of the courtyard, came to his ears. He turned.

By the vague light of a lantern, that seemed to be shooting its rays upward through an opening of some sort in a long, inverted cone, he made out the head and shoulders of a man.

"Come on, youse!" he heard a cry. "All we got to do now is keep him busy till the cops come!"

Graham fell on hand and knees again. Away behind the chimneys he crept, soundlessly. Beyond them he passed. In front of him, now, he perceived the edge of the roof, running at right angles with the street.

"It's there or nowhere!" thought he. "If nowhere, then I fight!"

He reached the edge, crouched there and peered down.

By the half light that filtered up from the street he saw at a glance the situation that confronted him.

An old-fashioned building joined the warehouse, its peaked roof, slate covered, twenty-five or thirty feet below.

A man, leaping to it—even though he could endure the shock—must land directly at the ridge, else he would skid down the slates either to back or front, and shoot off into the alley or into Spring Street. The drop from the eaves, Graham knew, could not be less than seventy feet. Sure death, to miss the ridge!

He groaned involuntarily, and looked back.

Already the lantern bearer had climbed up the scuttle on the roof of the warehouse. Graham could see him, and two others, cautiously treading along, casting fantastic ghostly shadows up against the chimney stacks.

"In three minutes they'll be on me! In two!" realized the fugitive. "I've got to do it!"

Summoning all his nerve and powers of cool calculation, he peered down again. The slate roof, he saw, was broken by a row of dormer windows. It terminated sharply, fifty or sixty feet away. Beyond it, was another flat roof, somewhat lower. *There*, he felt positive, must be a skylight or some means of getting down to the street.

"Well, here goes," said Graham. "If I pull through, all right. - If I don't, that's all right, too. I've done all a man could do. Now, it's up to Fate!"

Erect on the very edge of the warehouse roof he stood. Right on the eaves he balanced. A shout, behind him, and feet that struck out a tattoo over the gravel, told him he had been seen. He only smiled.

"Too late, now, for you to take a hand in this!" he cried.

Coolly he judged the distance, as so often he had done in the University gym. Then he clenched his fists, crouched, paused a second—and launched out, down, into empty space.

Despite his careful judgment and his skill, the shock all but stunned him. The breath was driven from his body. He lay there, dazed and gasping, conscious only of one thing—that he had struck the ridge, that he was not sliding down the roof, that he must hold on.

Then came the realization that he could not stay where he was. Painfully dragging himself along the slippery peak, he crept away. A sharp pain in his right leg told him he had injured it, though how badly he could not tell. In his tense excitement he put the pain out of mind, and kept on, on, with the steep, slippery precipice yawning for him at either hand.

He reached the farther end of the old roof.

From behind him he heard shouts. A fusillade crackled. He felt a dull twinge in his shoulder, as though it had been hit by a hard snowball.

Before him he dimly saw the next roof, only a few feet lower. To it he fell, rather than jumped. He hobbled grotesquely off along it. A housing loomed in front of him.

Round it he dodged, out of range of the revolvers.

He saw a door. All but exhausted he tried it. The door resisted.

Maddened then, as though by the long, savage succession of pursuit and suffering, he flung his whole strength against it.

Something broke. The door swung open. Graham staggered in, holding the latch. Vaguely he heard the disappointed shouts and oaths from the warehouse; they seemed very far, very strange.

He stood there an instant, swaying in the gloom, still clinging to the door.

"Where am I?" thought he. Everything seemed to whirl and spin. A roaring filled his ears.

"Buck up!" he said aloud. "Why, fool, you aren't going to cave in now, are you?"

As though the reproof had been spoken in scorn by some one else, he pulled together. He looked about him.

It was, he saw, an ordinary roof house that he stood in. Before him, stairs descended. At the bottom, a low-burning gas flame fluttered in the draft from the open door.

Quickly he closed it. He squared his shoulders, hastily brushed the gravel and soot from his knees, dusted his hands on his trousers, and with only a slight limp—despite the growing pain in his ankle, started confidently down-stairs.

Two minutes later, before any of the cautious tenement dwellers had had time to awaken to the situation or molest him, he issued into the street below.

Another minute, and he was round the corner. On the opposite sidewalk he saw two patrolmen running, full drive, toward the warehouse. His nerve was good enough to let him stop, turn, and watch them with an interest which would have disarmed the suspicions of keener brains than theirs.

A car came by. He signaled it, swung aboard, went inside and sat down calmly. He picked up a newspaper lying on the seat; behind it he hid his face, easily enough, from the sleepy and indifferent glance of the conductor and the two fagged passengers.

Before the warehousemen had reached the street and had incoherently explained things to the officers, he was a dozen blocks away.

Only then did he realize fully that he had been shot in the left shoulder. Despite that fact and a sprained ankle, he gamely boarded an "L" train. By standing outside on the platform, he concealed that fact from the guard and also managed to keep from fainting from loss of blood.

At One Hundred and Fourth Street he left the train. A few minutes later he had reached the flat, and was safe.

The danger was all past, and the prize won. His degree of Master Cracksman had been signed with his own blood, sealed and delivered. The way toward justice had been made free and open. His last, his greatest "crush" was at an end.

CHAPTER XXII.

Fiat Justitia.

FAR up toward the headwaters of the San Luis Rey, on a pine-grown plateau overlooking the fertile valley to westward with its orange groves and dotted towns, stands the bungalow of John Graham.

Away and away behind it the snow silver of the San Jacinto peaks, and to north of them the San Bernardino ranges, stand boldly out against the untroubled blue of the California sky. On clear days the flash and sparkle of Santa Catalina Gulf can be seen very far on the horizon, from the broad veranda that circles the broad, low dwelling place.

(The end.)

ANOTHER RAILROAD DOG.

His Name Was Jack and What He Didn't Know About Traveling Wasn't Worth While.

THE following interesting dog story was sent to us by one of the old-time readers of THE RAILROAD MAN'S MAGAZINE:

Jack was only a pup, a black-and-white fox-terrier, when I first saw him dodging around the roundhouse at Lexington, some ten or eleven years ago. It took about two years to get Jack to board an engine, but when he once got acquainted with the cab the strides that he took in his education were startling.

He soon learned to sit on the fireman's seat-box and hang his head out of the window with his paws on the arm-rest. He gradually got up sufficient courage to keep this position while the engine was under headway. My father, who was on the road at the time, taught him to start the bell by pulling the cord with his teeth.

Jack had his favorite engineers and among them were Uncle Dallas Pulliam and James Wiltshire. One of the most thrilling rides that Jack ever had was with Wiltshire on the 1182.

As you come up the road from the river, pass through the grove of piñons and by a graveled walk approach the bungalow, you can hardly fail to see a little spade and hoe in the pathway, a toy wheelbarrow or a sand pail. A miniature iron locomotive lies on its side at the end of a long furrow where childish hands have dragged and left it for some other play. Perhaps you may catch a glimpse of the little boy himself, off down the slope among the rough-barked, odorous trees. His mother, too—"Munner Agnes" he calls her—you may happen to see as she walks among her garden beds, watchful always of him; her white dress gleams among the greenery.

There is an old man, bald and feeble and much broken, whom the boy calls grandpa. Very spent and wasted he seems as he potters around, unmolested, in the flower beds. He never looks at you with level eyes, but always with a curious, blinking, sidelong glance. You might think him a trifle in his dotage. He creeps about, here, there, in the sun, lingering out the little fag end of life that still remains. Agnes sees how rapidly he is failing. In her heart of hearts—what does she think? Not even you can tell.

Train No. 14, a passenger, was leaving Lexington at 4.40 A.M., one cold, snowy morning when the hostler, W. O. Vaughan, climbed on to the pilot to ride from the depot to the crossover to throw the switch. Jack got aboard with him, but did not get off when he should have, and was carried on out of town. Wiltshire did not know that the dog was on his engine until Jack crossed over the steam-chest, made the trip along the running-board and scratched at the cab door for admittance. How he ever got from the pilot to the steam-chest has always been a mystery.

I have seen this dog on three different divisions of the L. and N., and on a number of trains between Louisville and Cincinnati. He would strike a freight out of Lexington and would not be seen in that city for months, but would be heard of now and then from one of the other divisions where he could be seen riding in the engines.

Jack knew his friends, and never forgot a kind word. Likewise he never forgot a harsh one.

ON THE EDITORIAL CARPET.

Where We Let Some of Our Superheated Steam
Escape, and Listen for a Pound in the Air Cylinder.

OUR first section of the 1911 special will make the run in schedule time, unless some of you flag it along the line. Every car is newly painted, the brasses are all polished, and the big Atlantic is steaming and ready. As we look it all over before it starts on its journey, we cannot find one flaw, but we want our readers to be in their respective towers of criticism ready to send word ahead to give us the arm, should they find anything that does not please them.

That is the only way in which we can make a magazine to give satisfaction to every one.

No train leaves a terminal without some complaining passenger, and, perhaps, no other train carries so many passengers as the one we are proudly starting on its monthly journey. In the little back shop here in New York, where the con, the eagle-eye, the shack, and all the rest of the crew are forever busy, it is a pleasure more than a pain to know that you have found a poem with disconnected joints, a story that reads like a lot of flat wheels on the down grade, or a special article that looms up as sadly as a hogger who, aiming for a record, has got the washout sign.

We think pretty well of this January section. We have tried to start the New Year right. Now let us take a little look at our February way-bill.

There will be some excess pressure on "The A. B. C. of Freight Rates," by John C. Thompson. The second part of this all-important discussion will have a plush seat in the February Pullman.

Robert H. Rogers is another one of our writers who went abroad last summer. While there he secured some red-hot cinders in the shape of articles which are going to be mighty valuable to you boys. They will show you the great differences between American and foreign railroads in all their branches. Both Mr. Rogers and Mr. Carter ran as extra trains while abroad. Mr. Carter's "Europe's Old-Fashioned Railroads" appears in this number. It clearly indicates that some of the railway methods still in vogue in Europe are about as funny as a lead crown-sheet.

Mr. Rogers's first article will tell of the fast run of the French express—how a crack European flier is operated as compared with one of our own. It is worth knowing.

We have a splendid bunch of stories about railroad men and their encounters with animals. All railroad men love animals, and these stories are the kind that hoist the steam in the laugh-injector.

The day of the pass is still a pleasant memory

to many politicians and others who found it necessary to travel without paying. We all know how the government put a stop to this form of graft a few years ago. If you will turn to the old letter by Bill Nye which we print on page 616 of this number, you will see what was an unexaggerated form of demand some twenty odd years ago. Though Bill was a humorist, the railroads received demands for passes which were equally as preposterous. We have a special article for February which tells of the old days when the railroads considered passes equal in importance with rolling-stock. How the railroads were annually held up for these special privileges makes one marvel that they stood for it so long.

The Help for Men Department will contain an article of special importance to young men employed in the business side of railroading.

Then there are other articles. One tells of the difficulties encountered by tramps sleeping on trains. We will have the second part of Mr. Walters's splendid article on bridge-building. Walter Gardner Seaver's roundhouse tales will appear again. "Ten Thousand Miles by Rail" will have its customary place, and Mr. Willets will tell of the famous hold-ups in the Missouri River Valley.

And at the front table of the diner will be our friend and philosopher, J. E. Smith, and his "Observations."

In the short-fiction cars you will find a particularly good story by George Allan England entitled "At the Semaphore." Robert Fulkerson Hoffman contributes one in his best style, "Bluffing It Through for Abel." F. H. Richardson writes about Bill, the fireman, at a high-brow lecture. Sumner Lucas, Augustus Wittfeld, and others equally as well known will be aboard.

Suffering feed-valves! We almost forgot! Honk and Horace have the time of their gay young lives breaking into polite society.

Two white flags at the boiler-sides for the February express!

PUSH IT ALONG.

THE letters of praise which have come to us during the past three months from countless of our readers are more than deeply appreciated. We say this with modesty bubbling from all our flues. When one man says, "I would not miss a copy of THE RAILROAD MAN'S MAGAZINE for five dollars;" another, "For my regular monthly laugh

I go to J. E. Smith and Emmet F. Harte," and another, "I read twelve magazines, and yours is the best"—with such words as these coming along we feel as if we had struck a running as easy as a down-grade on a sunny morning.

We want you boys to tell your friends how good the magazine is. We know you like it, and when you meet a friend who finds that his reading is not just up to the mark, ask him to look at THE RAILROAD MAN'S MAGAZINE. We believe it will interest him even if he is not a railroad man, and it is surprising how many readers we have whose only interest in railroadng is the wonderful romance, courage, and heroism which we describe in our pages.

You will do us a good turn by pushing a good thing along. We will reciprocate by giving you each month the very best reading matter that we can possibly secure.

RAILROAD EDUCATION.

RAILROAD education in the University of Illinois appears to be assuming unusual proportions. It is planned, we understand, to erect a large transportation building at Champaign, Illinois, where technical railroadng will be taught. The idea has been approved by railroad men, and, it is understood, the railroad companies of Illinois will lend substantial support to the originators in their attempt to secure an appropriation from the State Legislature for the new work.

The Santa Fe's shops are crowded with apprentices. The Pennsylvania's schools at Scranton and Bedford have their usual quota of ambitious young men who are looking to the railroads for their future. The International Correspondence Schools, which give an excellent education in all branches of railroadng, are receiving their large percentage of students who are destined to become railroad men.

With all this, it looks as if the railroads of the future will have the very best men that the country can produce, educated up to the standard of technical and theoretical expectations in the most approved manner. Wages have increased in railroadng at a greater rate, perhaps, than any other calling, but it is a calling for men of determination, courage, and initiative, because its future holds out the greatest possibilities.

MARINE ENGINEERING.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN the October issue of THE RAILROAD MAN'S MAGAZINE, I noticed an article in the Light of the Lantern Department asking for information regarding what it is necessary to do to become a marine engineer. My advice on the subject, based on my own experience, is this:

First serve four years in a shop if possible—the time served in a railroad-shop counting the same as any other. Next, spend a year at sea as

an oiler and water-tender and you are ready to go up for your examination before the United States inspector of hulls and boilers. If you pass, you receive a third assistant's "ticket."

If the applicant has no shop practise it is much harder. The length of time spent at sea is about six years. Two years in the shop and three at sea, however, will prove satisfactory.

The pay for oilers on the Pacific Coast, is \$45 a month and found. A water-tender gets \$55, while both oiling and water-tending on small jobs also brings about \$55. On the Atlantic Coast, these jobs bring about \$5 a month less, according to the regular union schedule.—G. E. M., San Francisco, Cal.

MOMENTS OF EMERGENCY.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

IN your issue of October, 1910, I read of the experience of one Joseph Lutz, engineer, to which I would like to take issue with you. Under the heading of "Moments of Emergency" is the story of how said Lutz got out on top of his engine and shut her off when his side-rod "stripped" her.

In my experience (which has been long and varied, and some of it right on that division, too) such a thing could not possibly be done.

Maybe you can explain how it was done. If you can, you will certainly relieve the minds of a big bunch of railroaders.

If you will publish this in your December issue of 1910, it will prove to all of us that you do not fear criticism.—J. D. HOYLE, Winnemucca, Nev.

We could not grant Mr. Hoyle's request regarding the publication of his letter in our December number, as that number had gone to press when the letter reached our office.

The story of the snapped side-rod told in "Moments of Emergency" in our October number seems impossible to any one not familiar with the type of engine commonly known as the "hog." The side-rods churn along immediately beneath the cab, which is divided into two parts and straddles the boiler at its middle.

In this particular case, as soon as the side-rod broke the engineer was at its mercy. It swung up with terrific force, wrecking his side of the cab and throwing him to the floor badly hurt. Even if he had been able to lift himself at once to his feet, the mechanism was so badly battered that it would not have responded. There was no way to stop the engine from the cab.

As soon as he realized what had happened, he knew that nothing remained but to cut the air, and, working his way through the scalding steam, which was escaping in great clouds, he passed over the boiler, crossed to the tank, and, at the imminent risk to his life, swung down between the pounding cars and opened the valve.

The hero of the accident, Fred Wooley, whose identity was confused in the original reports of the accident on account of his extreme modesty, has since received recognition for his heroic action in bringing the train to a stop and preventing a

wreck. The Central Railroad of New Jersey presented him with a handsome gold watch, on which is inscribed a description of the accident and the brave part he played.

GILSON WILLETS'S NEW BOOK.

GILSON WILLETS, well-known to readers of *THE RAILROAD MAN'S MAGAZINE* for his stirring stories of life along the right-of-way, has just published his first novel, a thrilling romance of mystery and adventure in Mexico of to-day, entitled "The Double Cross." The story is full of exciting intrigues and hazardous undertakings with an undercurrent of plot and counter-plot, in which a secret insignia plays an important part.

The author's extensive travels in Mexico and Central America have given him a deep insight to *mañana* land. He has instilled an atmosphere of soft perfumes, radiant moonlight, and flashing black eyes that few could equal.

The book is sure to be a success with rail-
roaders who appreciate a good, lively story. It won't let go of your interest until you've turned over the last page. It is illustrated by J. C. Chase. G. W. Dillingham Company. Price \$1.50.

THE BRAIN TEASERS.

YOU will notice that the Brain Teasers are not in their accustomed place this month. We regret this just as much as the mathematical minds who seek recreation in solving these choice twisters from month to month—but the fact of the matter is this: The last crop of teasers was so old that we did not deem them worthy of a place even on the slow freight.

We hereby issue orders to all our readers to send in some new teasers. Scratch your think-domes and see what you can give us. A puzzle for *THE RAILROAD MAN'S MAGAZINE* need obey only these three rules:

1. It *must* be a railroad puzzle.
2. It *must* be solvable.
3. It *must* be accompanied by its correct answer and solution.

The following are the answers to the teasers published on page 570 of our December number:

(14). Two miles approximately. Explanation: With the temperature at 32 deg., sound travels 1090 feet a second. To travel 2 miles, which is 10,560 feet, it will require 9.69 seconds, which is between 9 and 10 seconds, making the train about two miles distant.

(15). Fifteen cars.

DESPATCHING BY TELEPHONE.

EDITOR, *THE RAILROAD MAN'S MAGAZINE*:

HAVING read the article on the telephone, which appeared in the December issue of *THE RAILROAD MAN'S MAGAZINE*, and noting that it sets forth only the advantages, I beg to submit to the readers of your magazine some of

the disadvantages of telephone despatching, which are numerous, indeed.

It seems to me, if Morse were living and saw the new arrangement called a telephone system, he would laugh it to scorn and say, "Why, that is no system at all." And we operators would advocate Morse's views too.

On this road, [Cumberland Valley Railroad Company] of 116 miles single track, and, possibly, 50 miles double track, I have not heard of an operator that likes the telephones. I will not say, "telephone system," as it can not be called a system, for various reasons.

First: As the operator cannot be at the phone more than half the time he does not know whether the scheduled trains are running on time or whether they are two hours late.

Second: He does not know whether there are any extras out; and, if there are, whether within one or ten miles of his station.

Consequently, when he hears a train whistling, he rushes out and looks up and down the track, if there are curves near the office, to see which way the train is coming. When he ascertains its direction, he rushes back into the office and gives the train the proper signal, not knowing whether the train is No. 79, 83, or 85, unless he can judge by the make-up of the train. The poor, unprotected operator is working in the dark, no one but the dispatcher knowing what is going on.

Third: When the operator wishes to talk to the dispatcher, he has not time to stay at the phone for half an hour at a time, consequently he must go to the phone, take down the receiver and ascertain if the line is busy. If he finds it busy, he dare not break in. He goes back to the ticket-window and waits on half a dozen customers, then steals another minute and tries again with the same result. He repeats this operation probably a dozen times, gets disgusted and swears he will go where there are no phones—and do you blame him?

Heretofore, under the telegraph system, when the dispatcher called for an order, the operator could answer up and then resume his ticket-selling until the dispatcher had raised all the offices he wanted for the order. Now he must stay at the phone until several offices are raised and all have repeated the order, while behind him he hears the muttering of impatient, scolding passengers. Would it be any wonder then that he would get the order wrong, when he divides his attention between what is going over the phone and what the passengers are scolding about?

Fourth: There are so many words sound alike on the phone, and the operator may think he is right and be wrong all the time.

Many people have a mistaken idea that the phone is the faster. I have a "learner's" instrument in this office and have experimented on it with the following result: Order repeated back before the operator on the phone was two-thirds done.

To sum it up in a few words, railroading has lost its charm. Heretofore the op., no matter in what part of the building he happened to be, could listen to the merry hum of the instruments and know as much about the location of the trains as the dispatcher himself—and it was music to his ears. Now he must put the harness over his cranium, and, amid the hum of various noises like so many horses going into a barn, endeavor to

pick out what he is supposed to get, while a mob of angry passengers are making a break for the train without tickets.

The leverman, who, heretofore, listened to the instruments and threw levers at the same time, must wait until the despatcher sees fit to allow him to leave the phone. If he fails to get the track lined up properly for the approaching train, it means ninety days in the pie-house for him, or, perhaps, dismissal from the service.

Do you, readers, call that a "system?"

Under the telegraph system, the operator knew when a train was nearing his station and knew what orders he had. If the despatcher's attention was taken up elsewhere, he called the despatcher's attention to the fact that the train would soon be in and want orders.

But how is the situation now? Often a train gets by a station when it was the despatcher's intention to give orders at that point. The only instance I could point out, where a telephone is of any advantage, is where the operator has nothing else to do but listen to the phone. Those places are scarce, very scarce.—CLARENCE B. NAUGLE, Operator, Newville, Pennsylvania.

ANSWERS TO CERTAIN SIGNALS.

"CONSTANT READER," "OLD SWITCH-MAN," J. DOTSON AND OTHERS.—The words of the song, "Casey Jones," were printed in our July, 1910, issue. You may secure copies by sending 10 cents to this office.

V. C. W., Chicago.—Gilson Willets is a man and is very much alive. He was born on Long Island, New York, forty-one years ago.

FRANK TOWER, St. Louis.—All of our true stories are absolutely true. We take the greatest pains possible to verify every one.

S. G. F., Buffalo.—We could not print the music of your railroad hymn. Send on the words and let it go at that. Our boys will sing it all right if it contains the proper sentiment.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

I AM not a "rail" or a "snake," but a constant reader of your magazine. I like it very much.

In my travels this summer, I came across a queer little railroad here in Illinois—named The Hanover. I thought that the enclosed time-table clipped from the *Hanover Journal* might get a chance in your grand magazine.—C. A. B., Canton, Illinois.

HANOVER RAILWAY TIME-TABLE.

Schedule No. 1, effective March 28, 1910, 7 A. M.

SOUTH BOUND NORTH BOUND.

ARRIVE		HANOVER		LEAVE	
No. 4	No. 2	No. 6	No. 7	No. 3	No. 5
6:35 pm	12:35 pm	10:30 am	8:30 am	11:45 am	5:45 pm
LEAVE		N. HANOVER		ARRIVE	
6:25 pm	12:25 pm	10:00 am	9:00 am	12 noon	6:00 pm

No. 7—Way freight—connects with C. G. W. No. 6 eastbound.

No. 3 connects with C. G. W. No. 3, westbound.

No. 5 connects with C. G. W. No. 4, eastbound. Will sell tickets to any part of the United States, handle Wells Fargo Express and have money-orders for sale.

FRANKLIN MILLER, Agent.

The Hanover may not cover the entire State of Illinois, but Superintendent Miller has more work to do than any agent on one of the big roads. He is the whole works—station-agent, passenger-agent, freight-agent, bookkeeper, and conductor. It keeps him hustling both day and night to do all the work in his various offices, as accounts of all transactions must be kept as thoroughly and accurately as on any of the big railways of the country.

EARLY WALSCHAERT GEAR ENGINES.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

THE Walschaert Valve Gear has been in use in this country since 1874, on the Boston, Revere Beach and Lynn Railroad, and on narrow-gage locomotives built by William Mason of Taunton, Massachusetts.

Shortly after Mr. Mason built a standard-gage locomotive called the "William Mason," for the northern division of what was at that time the Old Colony Railroad, running between New Bedford and Fitchburg. The writer was well acquainted with this engine and its engineer, having ridden on it several times.

In 1876, William Mason built a narrow-gage engine named "Onward," fitted with the Walschaert Valve Gear. This engine was on exhibition during the Centennial Exposition at Philadelphia, hauling passenger-trains around the grounds. As the road was composed almost entirely of sharp curves and steep grades, this service was exceedingly hard, but the engine performed the work satisfactorily, and at the end of the season it was in almost as good condition as when it commenced running.

At the close of the Exposition, this engine was sold to the New York and Manhattan Beach Railroad, which resulted in an order for nine more engines of the same pattern. I remember this engine and its engineer—the late William Parks of Taunton, Massachusetts—very well.

Between 1878 and 1883, Mr. Mason built twenty-five engines for the Denver and South Park and Colorado Railroad, fitted with the Walschaert Valve Gear. In 1884 he built a standard-gage locomotive for the Nantasket Beach Railroad; in 1885, one for the Boston and Maine, to run between Boston and Medford.

These engines were also very satisfactory. The writer had an opportunity of riding on both several times. After Mr. Mason stopped building locomotives, the Boston, Revere Beach and Lynn Railroad secured these patterns and had several locomotives built in Manchester, New Hampshire, fitted with the Walschaert Valve Gear. They have now about 25 engines in service.—J. F. DAMON, Milford, Massachusetts.

AND EVEN THE EDITOR.

THE writer is a ham operator, an amateur locomotive fireman and engineer, a street-car motorman for experience, a stenographer and typewriter for emergencies, an organist for

pleasure, and a steady reader of THE RAILROAD MAN'S MAGAZINE for profit and recreation. Agreeable to request for a vote, I attach mine, and you will see I have checked all on the list, even to the editor. What more can a fellow say if the magazine can supply thought and pleasure and profit to a man who can still do all the aforesaid and run a street-railway—be superintendent of a big manufacturing plant and yet, values the magazine above all that he can find time to read.

Faithfully and fraternally yours—A HAM.



A WOMAN'S APPRECIATION.

EDITOR, THE RAILROAD MAN'S MAGAZINE:

I HAVE been a constant reader of your magazine ever since the first number, and very few of them have I missed.

I am not one of the railroad boys, but just a wife of one of the engineers of the Southern Pacific Company, Los Angeles division.

However, I take a great deal of interest in all of their work, and enjoy and appreciate THE RAILROAD MAN'S MAGAZINE very much. I like the Editorial Carpet and Honk and Horace, I think, the best; but I do not miss anything except the brain teasers, which, of course, are not intended for wives.

I do want to mention a story in the September number, "Ten Thousand Miles by Rail," where Mr. Willets speaks of Mother Allen. I cried when I read that story.—Mrs. F. T. S., Los Angeles, California.



OLD-TIME POEMS.

FROM one of our readers in Pennsylvania we have received "The Section Boss's Lament." He says in his letter: "I enclose a copy of a 'classic' which I discovered when looking over some old papers recently. From actual experience, in the maintenance of way department, I can vouch for the truth of Danny's remarks." Our friend refers to his road:

THE SECTION BOSS'S LAMENT.

ME father, me brothers, says Danny, the boss,
And all of me kin that Oi iver have
known,
Has worked on the road since they laid the first
tie,
Revered and renowned is the name of Malone.
For twenty-one years on the siction Oi've toiled,
In the rain and shine, in the summer and fall,
Because Oi was worthy, the roadmaster said,
They put me in here as the boss of them all.

Sure me loife was contint whin Oi worked on the
road,
And niver so much as a kick did Oi make;
But now Oi could quit any toime of the day,
When Oi think of me head and the way it does
ache.
For it's aisy to do what the siction boss says,
But arragh! when you're bossin' a hundred or
two
It's different, sure. It's the truth thot Oi spake,
For it's hell if ye don't and it's hell if ye do.

First the roadmaster comes, and he looks at the
job,

"Sure," sez he, "you're not doin' this track-
layin' right."

"But it's Mr. White's blueprint," sez Oi, "Mr.
Flynn."

"Damn the blueprint," sez he, "damn the print
and damn White;

Faith, ye'll do as Oi tell ye or git off the job."

"Sure Oi will, Mr. Flynn," sez Oi, bowing a
few.

And the chafe ingineer raised Nid the next day.

Sure it's hell if ye don't and it's hell if ye do.

The superintendent comes along in his car,

"Phwat the hell is the matter? Look here, Dan
Malone!"

"But the chafe ingineer gave the orders," sez Oi.

"Damn the chafe ingineer! Let him lave ye
alone!"

That's the way they go on, sure Oi'm spaking the
truth;

For the poor siction boss has of troubles a few,

Sure, Oi'd rather be back tampin' ties be the day,

For it's hell if ye don't and hell if ye do.



EDITOR, THE RAILROAD MAN'S MAGAZINE:

THE following poem I found in an old maga-
zine. I take pleasure in forwarding it to
you. I feel quite sure that it will be ac-
ceptable to the majority of your readers, as it is
of slightly higher tenor than the most of railroad
poems:

THE BRAKEMAN ON THE FREIGHT.

BY GEORGE E. BOWEN.

By my warm window snugly wrapped
Away from winter's wrath,
I watch the tide of life go by
Along the commerce path.
They hurry on—the young, the old,
The hungry, rich and poor—
A swift procession toward the prize
All struggle to secure.

I may not measure them aright,
Yet through each guise I peer
Into the purpose of the heart
That knows the least of fear.
And though full many a hero may
Among them battle fate,
I hold above his fellows all,
The brakeman on the freight.

No wreath of holly waits for him
Who struggles through the night
To make his sleepless duty whole
And guard with anxious might
The treasures of the rushing train
That thunders on its way
To feed and clothe and shelter men
And help them as it may.

No feast for him is richly spread
Who through the storm's delay,
Brings succor to his starving kind
And drives their fears away—
A royal banqueter, he sat,
With duty long and late,

While polar plenty surfeited
The brakeman on the freight.

Sometimes the heat is pitiless,
Again, the fatal sleet
Spreads death along the narrow way
That offers no retreat.
Yet, be his train a solid one
Or mixed by wretched fate,
One duty calls forever to
The brakeman on the freight.

Always the crashing, mighty jar
Of wheels that shake the earth
Proclaims the hero of the road
And tells his rugged worth.
His constancy is color fast,
And wears through sun or rain,
The same devotion, night or day,
Though long or short the train.

I don't forget the engineer—
His is an honored name,
For all the world has sung his praise
And glorified his fame.
But I propose more than a toast
Wherein to fairly rate
The conscience and the credit of
The brakeman on the freight.

Winter or summer, wet or dry,
On mountain or on plain,
You'll find him loyal to his trust—
The genius of his train.
The language of his lantern cries
Along the blackest night,
Defying death, that men may live
From cars delivered right.

The roughest work, the toughest fare,
Make this grim conqueror
A rugged force of stoic mien
And hard exterior.
But manhood's independent pride
Crowns the subordinate
A ruler of the rail while he's
The brakeman on the freight.

I wave to him my best salute
Where'er his train goes by—
A brave commander tightly perched
Upon a cartop high—
No field of battle ever knew
Of courage grand or great,
A stouter kind than surely leads
The brakeman on the freight.

Good cheer to you, my steady friend,
Come weather foul or fine,
Long may you live, and ever bright
Your starry signal shine.
Where'er you go, oh, be you safe—
The tempest for your mate—
And all the world a lover of
The brakeman on the freight.

Until another time, good friend,
Oh, let it be—*adieu!*
For, by my train, a braver heart
Than yours I never knew.

Hold fast! and duty give you grace,
On curving track or straight,
To fail nor fall while you shall be
The brakeman on the freight.

Trusting that I am not encroaching upon your
time, as I know so many do, I am respectfully
yours,—W. E. FIEDLER, Louisville, Kentucky.

Thank you for the poem, Mr. Fiedler. You may
"encroach on our time" as soon as you like if you
find another old one as good.

ONLY A BRAKEMAN.

BY W. C. HAPLEY.

(Published by permission of the Charlie Tillman Song
Book Company, Atlanta, Ga., owners of the copyright.)

'T WAS only a poor dying brakeman,
Simply a hard lab'ring man,
And the smoke and the soot of the engine,
Had covered his face of tan.
'Twas only a tangled being,
Nobody knew "What's his name,"
And they buried him out by the wayside,
In a rustic-like coffin and plain.

CHORUS.

Only a brakeman, only a brakeman,
Out and away from his home;
And the loved ones to-night in their sadness,
Are waiting and watching alone!

'Twas simply the old, olden story,
No one to smooth down his hair;
There was no one to kiss him for loved ones,
No one to offer a prayer.
There was no one to tell him of heaven,
No one to point him to God!
But quickly and deeply they laid him
Away in the cold, cruel sod.

Repeat Chorus.

Oh, roughly they wrote on his head-board,
"One simply killed at the brake,"
But they said not a word of his hardships,
A-working for others' sake.
'Twas only a poor dying father,
Out and away from his home!
And the loved ones, to-night in their sadness,
Are waiting and watching alone!

Repeat Chorus.

'Twas simply a few little children,
Only a heart-broken wife,
Privations for these he had suffered,
And gave up his own precious life.
God pity these poor, struggling brakemen,
Pity each hard lab'ring man,
And make us feel kindly toward them,
God help us to hold up their hand!

Repeat Chorus.



When love languishes



Love chained to a coal-hod is a sorry spectacle. Men chafe at the burden of climbing stairs with a coal-scuttle—once in a while they do it with an “Oh-let-me-help-you-dear” expression, but the moment it becomes a daily duty, the joy is fled.

AMERICAN & IDEAL RADIATORS & BOILERS

do away with coal-hod slavery for men and women.

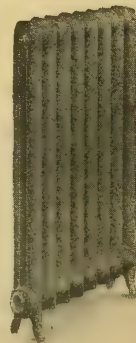
Then, too, the coal-hod kind of heating means ash-dust, embers and soot spread through the living rooms, which in turn means incessant toil to make the rooms clean. No woman is ever happy to see her efforts wasted. Women love cleanliness and if this is impossible then the house is not a home. No architect or manufacturer would think of heating a factory by grates, stoves or hot-air furnace. Why should men expect their wives to put up with such old-style methods?

In an IDEAL Boiler the fire will not need rekindling in the whole heating season—will run 8 to 16 hours or longer without recoaling—depending of course upon the severity of the weather. A child can

run the outfit.

Ask your architect to specify and insist on IDEAL Boilers and AMERICAN Radiators. Fully guaranteed. Do not take any other.

Every owner or tenant—small or large—in town or country—ought to have our catalogue (free). If the care of old fashioned heating is robbing you of two hours a day which could be devoted to better purposes, don't delay longer. All inquiries cordially welcomed.



IDEAL Boilers and AMERICAN Radiators keep a new house new and cause an old house to have its life and value prolonged.



A No. 22 IDEAL Boiler and 240 ft. of 38-in. AMERICAN Radiators, costing the owner \$115, were used to heat this cottage.



A No. C-241 IDEAL Boiler and 555 ft. of 38-in. AMERICAN Radiators, costing the owner \$250, were used to heat this cottage.

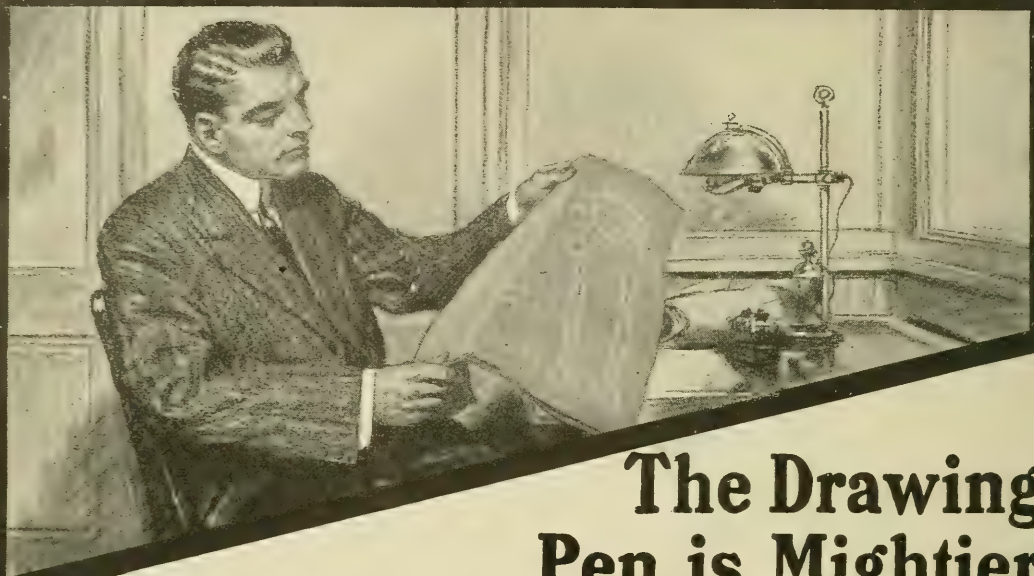
At these prices the goods can be bought of any reputable, competent Fitter. This did not include cost of labor, pipe, valves, freight, etc., which installation is extra and varies according to climatic and other conditions.

Showrooms in all large cities

AMERICAN RADIATOR COMPANY

Write to Dept. J
Chicago





The Drawing Pen is Mightier

IT'S so easy to enjoy yourself. Never were there so many different forms of amusement as there are to-day. But the fact cannot be denied, if you want to fatten your own pay-envelope and succeed in life, you **must** draw the line somewhere.

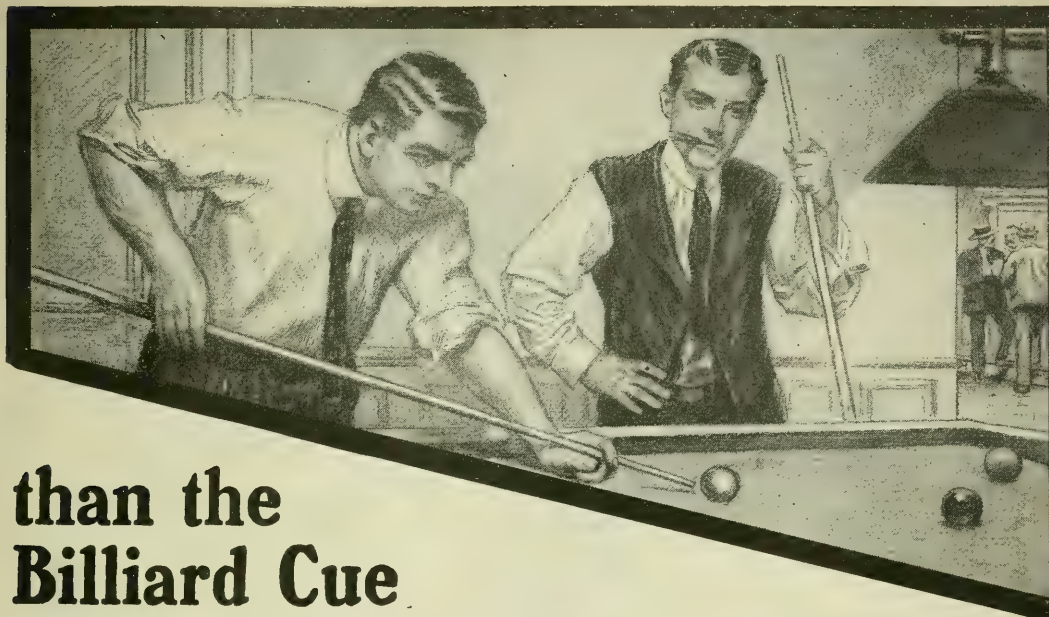
Yes—there **is** a way for you—a way that has been blazed and followed by exactly such men as yourself. These men had all the inborn love of a good time, and **still** have it. But they came to realize, before it was too late, that much of their pleasure time could be spent to far better advantage.

And this was the result:—

Joe Stieren advanced himself from machine-wood worker to foreman; Jonathan Thomas was promoted from miner to Assistant Mine Inspector; Ralph Davis changed from elevator man to electrician; Charles V. Cosby moved up from paymaster's clerk to superintendent of construction; Tom Walsh from proofreader to draftsman; Bert Spark's salary jumped from \$50 a month to \$1000 a year. John Wing's salary doubled itself in less than two years—and so on, without end. These names are picked at random from the list of thousands of successful students of the International Correspondence Schools—men who were helped in their spare time to win success in their chosen line of work. Now—

What are you going to do about it?

It's a pretty poor sort of chap who hasn't the ambition to find out how he **can** be helped—especially when finding out costs



than the Billiard Cue

nothing. What are **you** going to do about it? Have **you** enough ambition to mark the attached coupon to learn of the special way by which you can have **your** position bettered?

Marking the coupon costs nothing, and is in no way binding. On the contrary, it brings you advice and information telling how you can qualify through I. C. S. help for splendid positions in the **occupation of your own choice**, without leaving home or stopping work. So long as you can read and write, it is absolutely immaterial who you are, what you do, where you live, what your salary, where you got your schooling, or what your age—

The I. C. S. has a way for you

**Prove your ability
by marking the coupon NOW.**

Now—Don't you think it well worth your while to get in line for the really good things of life when the way is so easy? Over three hundred I. C. S. students every month **VOLUNTARILY** report salary increases and promotions won wholly through this I. C. S. help—331 were heard from during October.

So long as you can furnish the ambition, the I. C. S. can furnish the training—and in such an easy way that the cost will not be a burden to you.

You've **got** to wake up **some** time and look this matter squarely in the face. Wake up **NOW**—before it is too late.

Mark and mail the coupon to-day. Then the I. C. S. will step in and show you beyond any question of doubt how you can be helped.

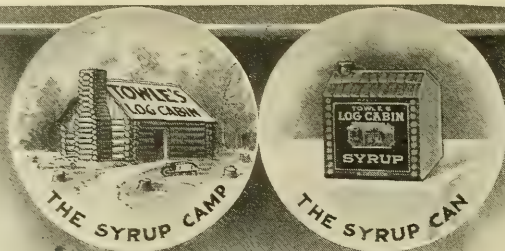
INTERNATIONAL CORRESPONDENCE SCHOOLS, Box 861, SCRANTON, PA.

Please explain, without further obligation on my part, how I can qualify for the position, trade or profession before which I have marked **X**.

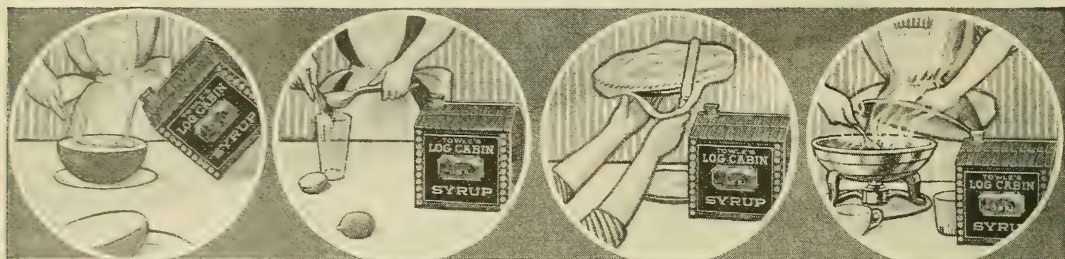
General Foreman
R. R. Shop Foreman
R. R. Traveling Eng.
R. R. Trav'g Fireman
Locomotive Engineer
Air-Brake Instructor
Air-Brake Inspector
Air Brake Repairman
Mechanical Engineer
Mechanical Draftsman
R. R. Construction Eng.
Surveyor
Civil Engineer
Banking

Electrical Engineer
Machine Designer
Electrician
Mining Engineer
Mine Foreman
Foreman Machinist
Chemist
Assayer
Architect
Book keeper
Stenographer
Advertising Man
Automobile Running
Concrete Construction

Name _____
Employed by _____ R. R.
Employed as _____
Street and No. _____
City _____ State _____



From Camp to Table



ON GRAPE FRUIT

IN LEMONADE

IN DIES

IN CANDY

Syrup in Cooking

Better and More Palatable than Sugar

Towle's Log Cabin Syrup

Full Measure

Aside from being **good** on griddle cakes, waffles, etc., gives a delicious New Flavor to all cooking that is most delightful.

You will be surprised to know of the many ways Towle's Log Cabin can be used. We have prepared an attractive book "From Camp to Table" which tells how to make the dishes illustrated and contains thirty-three prize recipes.

Every housewife should have it. You will delight your family with the many new delicacies you can make. **Send for it. It's FREE.**

How often have you or the family expressed a desire for something new,—something different? So positive are we that Towle's Log Cabin Syrup will satisfy this craving that if your grocer hasn't got it, it will pay you to go to one who has.

Towle's Log Cabin Syrup

Is the Pioneer Maple Syrup of

Full Measure—Full Quality—Full Flavor

It is the only Maple Syrup used extensively, and known favorably all over the world. Wherever Syrup is used, the names "Towle" and "Log Cabin" are recognized as synonymous with the very highest quality in syrup.



IN JAMS AND PRESERVES



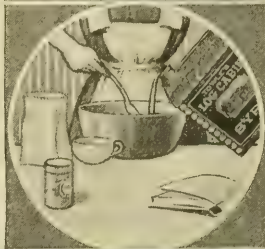
SEE RECIPE BOOK



IN HOT FRUIT SALAD

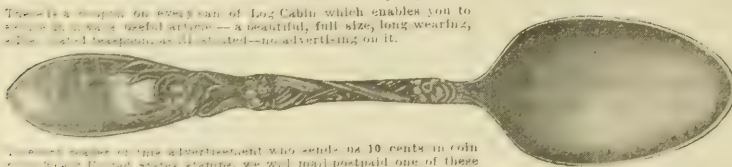


OF COURSE ON CAKES



AND IN ALL COOKING

Towle's is a syrup of the highest quality of Log Cabin which enables you to use it in all your cooking and baking—a beautiful, full size, long wearing, and most delicious of all—advertising on it.



A
Souvenir
of
Towle's
Log
Cabin

Persons who order this advertisement who send us 10 cents in coin or 25¢ in United States stamps, we will mail postpaid one of these spoons. Address—

The Towle Maple Products Co., St. Paul, Minn., U.S.A.

Refineries and Offices:

St. Johnsbury, Vt.
Towle's Maple Sugar Forests.

St. Paul, Minn.
In the Center of North America.

San Francisco, Cal.
Pacific Coast Headquarters.

Grape-Nuts

A food that
supplies the
right kind of

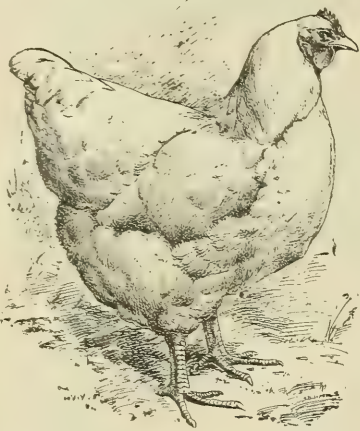
NOURISHMENT

in the right
balance for

Body & Brain

"There's a Reason"

Postum Cereal Co., Ltd., Battle Creek, Mich., U. S. A.



If you want to succeed with poultry as the CURTISS brothers have succeeded, subscribe NOW and get the new

CURTISS POULTRY BOOK

which tells how Roy Curtiss, a New York farmer's boy, starting about twenty years ago, with a few neglected hens, has built up at NIAGARA FARM the **LARGEST PRACTICAL POULTRY PLANT IN THE WORLD**, with sales of

OVER \$100,000 A YEAR

Roy agreed that if his father (a grain merchant and farmer) would furnish the feed he (Roy) would take all care of the flock and supply eggs and chickens for the farm table, and all that were left over were to belong to him. In two years Roy was using so much feed that his father had to cry quits, but the boy kept right on. He would start at two o'clock A.M. for Niagara Falls, 13 miles away, with poultry and eggs to sell. His brother joined him, and the business grew and grew. They took the farm and paid off the mortgage. They built and added to their plant, learning slowly how to avoid losses and make the greatest profits.

But they had no guidance, and had to learn by their own mistakes. If **they** had had such a guide as the **CURTISS POULTRY BOOK** it would have saved them thousands of dollars and years of lost time.

This capital book was written right at Niagara Farm by the veteran poultryman, **MICHAEL K. BOYER**. Mr. Boyer had the Curtiss brothers right at his elbow with their records and data. He says he never saw a general poultry plant so well managed at every point. No "putting on style," no fancy buildings, no ornaments, but straight, solid **business**. Everything is planned for months ahead. Every day shipments go off, every day money comes in. You could hardly believe how little they lose. Their percentage of fertile eggs, of live, strong chickens hatched, of day-old chicks shipped, without loss, to Kansas or Florida, is really wonderful.

And this book gives all their methods of managing incubators, handling eggs, feeding chickens and ducks, killing, dressing, packing, and marketing, their formulas for mixing feed at different ages. And all these have been tested and improved by years of experience, resulting in the most profitable general poultry plant in the world. Whether you raise chickens, ducks, or eggs, whether you keep forty fowls or forty thousand, you will find here help that you can get in no other way.

Profusely illustrated, with many fine engravings, from actual photographs taken from life.

Have you use for such a book? Then read the offer below.

The **CURTISS POULTRY BOOK** is sold in combination with the Farm Journal, Philadelphia, Pa.

The **FARM JOURNAL** is the standard paper for everyone who lives in or near the country, or ever has, or ever expects to. A particularly fine poultry department, more valuable than most poultry papers. 33 years old, 750,000 subscribers and more. Goes everywhere. Clean, clever, cheerful, amusing, intensely practical. Cut to fit everybody, young or old, village, suburbs, or rural routes. Unlike any other paper, and always has been.

AMERICAN POULTRY ADVOCATE, the great New York State paper published at Syracuse, and full of good reading matter, is always welcomed by the subscriber. Now in its 18th year. It is conceded to be one of the best poultry papers published in the United States. Well edited by recognized authorities on the subject of practical poultry raising. Has a circulation of 45,000 copies per month.

Special Offer For \$1.00 (cash, money order or check) we will send postpaid the **Curtiss Poultry Book** and the **Farm Journal** for two years, and **American Poultry Advocate** two years, all for \$1.00 if order is sent at once to **AMERICAN POULTRY ADVOCATE, 46 Hodgkins Block, Syracuse, N. Y.**

COLGATE'S SHAVING LATHER

Three Kinds of Best

Stick, Powder and Cream

You now have your choice—whichever you choose, the lather is the best

—the Famous Colgate Quality.

Softening, soothing, sanitary. Best in its lasting abundance. Best in its antiseptic qualities and freedom from uncombined alkali. (See chemist's report below.) And best in the comfort of its skin-refreshing effect.

Do not ill-treat your face and handicap your razor by using an inferior lather.

Colgate's is the lather that can be made in three ways with one unvarying result—perfection.

3 METHODS-1 RESULT

"I have made careful examination of Colgate's Shaving Stick, Rapid-Shave Powder and Shaving Cream. I found that all of these Shaving preparations are notably free from uncombined alkali and in the form of Shaving lather all are germicidal."

(Signed) Frank B. Gallivan, Ph.D.

Aug. 25, 1910

Bathway Bldg., Boston, Mass.

Colgate's Shaving Stick is the "Magic Wand of Shaving" in the original nickeled box.

Colgate's Rapid-Shave Powder is the "Powder that Shortens the Shave."

Colgate's Shaving Cream is the "Perfected Cream."

Trial size of Stick, Powder or Cream for 4 cents.

COLGATE & CO., Dept. 55
199 Fulton St. New York

Makers of the famous
Cashmere Bouquet Soap

STICK

POWDER

CREAM

AGENTS STOP RIGHT HERE LISTEN SOMETHING NEW

Sells on sight. No experience necessary. Send your name and address today for free information. Phenomenal opportunity to make money. We want Agents, General Agents and Managers in every county. Anyone can do the work. 100% PROFIT TO AGENT. No charge for territory. You will earn

\$45.00 TO \$90.00 A WEEK

easily at the very beginning. Grand free advertising special introductory plan for agents on the most sensational selling article of the age. Every man a buyer—quick. Every call a sale. Success is yours. Money in abundance is coming to you. Independence—pleasant position—luxuries—a start in real life—**SUCCESS.**

One man (Hiram Purdy) took 27 orders first day out (sworn statement); profit \$40.50. 26 orders next day. Once our agent, always a money maker. Get out of the rut. Send for absolute proof. Young men, old men, farmers, teachers, carpenters, students, bank clerks—everybody makes money.

LISTEN TO SUCCESS: Read these reports. J. J. Green started selling in Louisiana and became General Agent controlling extensive territory. At a single time he ordered 50 agents' outfits. Land office business right off the jump. Orders, orders everywhere. A. M. Clark, of Kansas, wrote, "I was out of town the other day—did not go with the intention of doing any soliciting. Just got to talking and sold 6 before I knew it." Profit. \$9.00. Brand new business for agents. Sales roll up everywhere.

400,000 IN 4 MONTHS

JUST THINK OF THIS! A positive automatic razor stopper—absolutely guaranteed. Here at last. The thing all men have dreamed about. Inventor's genius creates the marvelous **IMPROVED NEVER FAIL**—perfect in every detail, under every test. With it you can instantly sharpen to a keen, smooth, velvety edge any razor—old style or safety—all the same. Handles any and every blade automatically.

Few seconds with the **IMPROVED NEVER FAIL** puts a razor in better shape to give a soothing, cooling, satisfying shave than can an expert hand operator in 30 minutes. **New Idea. Works great.** Makes friends everywhere. Sells itself. Men are all excited over this little wonder machine—over its mysterious accuracy and perfection. Eager to buy. Agents coining money. Field untouched. Get territory at once. We want a thousand Agents, General Agents, Salesmen and Managers. Act today. Exclusive territory.

SEND NO MONEY. Just your name and address on a postal card and we will mail complete information, details, and sworn-to proof **FREE.** Don't delay. Territory is going fast. Give name of county. Write today. Address,

THE NEVER FAIL COMPANY, 919 COLTON BUILDING, Toledo, Ohio



IF YOU LIKE HUNTING, FISHING, CAMPING,

You will like the NATIONAL SPORTSMAN

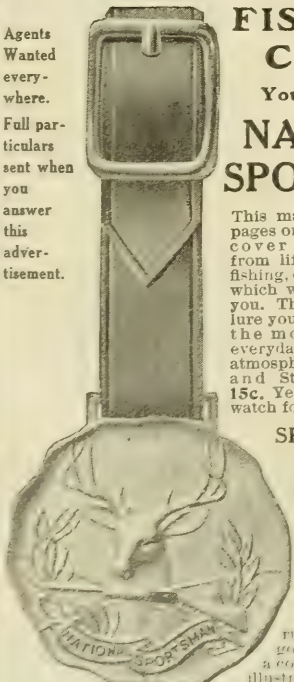
This magazine contains 160 pages or more, crammed from cover to cover with photos from life, stories of hunting, fishing, camping and trapping which will thrill and interest you. This monthly visitor will lure you pleasantly away from the monotonous grind of everyday work to the heartful atmosphere of Field, Wood and Stream. Single copies 15c. Yearly subscription, with watch fob, \$1.00.

SPECIAL TRIAL OFFER

Send us 25 cents, stamps or coin, and we will send you the National Sportsman for 3 months, also one of our heavy burnished Ormolu Gold Watch Fobs (regular price 50c.) as here shown, with russet leather strap and gold-plated buckle. Also a copy of our new 32-page illustrated premium list.

NATIONAL SPORTSMAN, 39 Federal St., Boston, Mass.

Agents Wanted everywhere. Full particulars sent when you answer this advertisement.



Thousands have written for my big dollar offer. Have you? It is the biggest money's worth I know of.

This is your opportunity to prove conclusively that

MAKAROFF RUSSIAN CIGARETS

are all that we claim for them, and we claim a lot. Better write today.

Makaroff - Boston

Mail address—95 Milk Street, Boston

15c And a Quarter

Ask Your Dealer



Here is the way through

OUR "Deferred Tuition Scholarship" supplies the way and removes the last barrier between the progressive, ambitious young man and the higher position and salary to which he aspires.

Read every word of this offer.
We mean it, and there is a fine
chance for you if you improve it.

This country is full of energetic, capable men whose days are spent in work which is not suited to their natural talents. Thousands of these men realize that all that stands between them and good positions with big pay is their lack of special training in some one thing. They lack the time and the means to stop work and take a course of training, and so they go on year after year, always getting farther away from what they most want. We are going to help these men. We are going to lend them the cost of the training they need and let them make their own terms about repaying us.

This is the greatest offer ever made to men who have "got it in them to rise." We have studied the matter very carefully, and are fully prepared to help everyone who comes to us in earnest.

If you are one of these capable, ambitious fellows, willing to study for an hour every evening after working hours, willing to stick to it with the kind of persistence that wins, and without which nothing worth while is ever won; then you are on the right track.

Check the coupon, mail it to us, and we will explain fully our "Deferred Tuition" plan, how we will lend you the cost of the tuition, and allow you to pay us back when the increase in your yearly income equals the amount of the loan.

No Promotion—No Pay—that's what our "Deferred Tuition" scholarship means.

Ask for the little book, "Profitable Worldly Wisdom." It will be sent to you free and will help you.

AMERICAN SCHOOL of CORRESPONDENCE
CHICAGO. U. S. A.

OPPORTUNITY COUPON

American School of Correspondence, Chicago, U. S. A.

Please send me your Bulletin and advise me how I can qualify for the position marked "X." R. R. Man's, 1-11

...Book-keeper	...Draftsman
...Stenographer	...Architect
...Accountant	...Civil Engineer
...Cost Accountant	...Automobile Operator
...Systematizer	...Electrical Engineer
...Cert'd Public Acc't	...Mechanical Engineer
...Auditor	...Moving Picture Op'r
...Business Manager	...Steam Engineer
...Commercial Law	...Fire Insurance Eng'r
...College Preparatory	...Reclamation Engineer

NAME

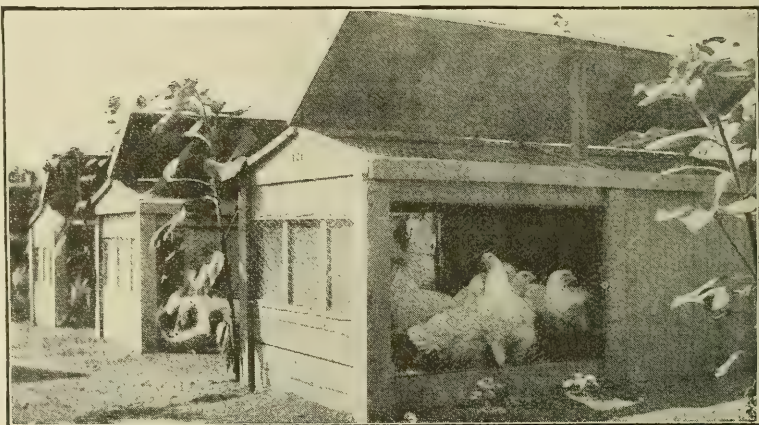
ADDRESS



A LIVING FROM POULTRY

\$1,500.00 from 60 Hens in Ten Months on a City Lot 40 Feet Square

TO the average poultry-man that would seem impossible, and when we tell you that we have actually done a \$1500 poultry business with 60 hens on a corner in the city garden 40 feet wide by 40 feet long, we are simply stating facts. It would not be possible to get such returns by any one of the systems of poultry keeping recommended and practiced by the American people, still it can be accomplished by the



Note the condition of these three months old pullets. These pullets and their ancestors for seven generations have never been allowed to run outside the coops.

PHILO SYSTEM

THE PHILO SYSTEM IS UNLIKE ALL OTHER WAYS OF KEEPING POULTRY

and in many respects just the reverse, accomplishing things in poultry work that have always been considered impossible, and getting unheard-of results that are hard to believe without seeing.

THE NEW SYSTEM COVERS ALL BRANCHES OF THE WORK NECESSARY FOR SUCCESS

from selecting the breeders to marketing the product. It tells how to get eggs that will hatch, how to hatch nearly every egg and how to raise nearly all the chicks hatched. It gives complete plans in detail how to make everything necessary to run the business and at less than half the cost required to handle the poultry business in any other manner.

TWO-POUND BROILERS IN EIGHT WEEKS

are raised in a space of less than a square foot to the broiler, and the broilers are of the very best quality, bringing here 3 cents a pound above the highest market price.

OUR SIX-MONTH-OLD PULLETS ARE LAYING AT THE RATE OF 24 EGGS EACH PER MONTH

in a space of two square feet for each bird. No green cut bone of any description is fed, and the food used is inexpensive as compared with food others are using.

Our new book, **THE PHILO SYSTEM OF POULTRY KEEPING**, gives full particulars regarding these wonderful discoveries, with simple, easy-to-understand directions that are right to the point, and 15 pages of illustrations showing all branches of the work from start to finish.

DON'T LET THE CHICKS DIE IN THE SHELL

One of the secrets of success is to save all the chickens that are fully developed at hatching time, whether they can crack the shell or not. It is a science, and, believed to be the secret of the ancient Egyptians and Chinese, which enabled them to sell the chicks at 10 cents a dozen.

CHICKEN FEED AT FIFTEEN CENTS A BUSHEL

Our book tells how to make the best green food with but little trouble and have a good supply any day in the year, winter or summer. It is just as

impossible to get a large egg yield without green food as it is to keep a cow without hay or fodder.

OUR NEW BROODER SAVES 2 CENTS ON EACH CHICKEN

No lamp required. No danger of chilling, over-heating or burning up the chickens as with brooders using lamps or any kind of fire. They also keep the lice off the chickens automatically or kill any that may be on them when placed in the brooder. Our book gives full plans and the right to make and use them. One can easily be made in an hour at a cost of 25 to 50 cents.

TESTIMONIALS

MY DEAR MR. PHILO:—

Valley Falls, N. Y., Oct. 1, 1910.

After another year's work with your System of Poultry Keeping (making three years in all) I am thoroughly convinced of its practicability. I raised all my chicks in your Brooder-Coops containing your Fireless Brooders, and kept them there until they were nearly matured, decreasing the number in each coop, however, as they grew in size. Those who have visited my plant have been unanimous in their praise of my birds raised by this System.

Sincerely yours, (Rev.) E. B. Templar.

MR. E. R. PHILO, Elmira, N. Y.

Elmira, N. Y., Oct. 30, 1909.

Dear Sir:—No doubt you will be interested to learn of our success in keeping poultry by the Philo System. Our first year's work is now nearly completed. It has given us an income of over \$500.00 from six pedigreed hens and one cockerel. Had we understood the work as well as we now do after a year's experience, we could easily have made over \$1000.00 from the six hens. In addition to the profits from the sale of pedigreed chicks we have cleared over \$968.00, running our Hatchery plant, consisting of 56 Cycle Hatchers. We are pleased with the results, and expect to do better the coming year. With best wishes, we are Very truly yours, (Mrs.) C. P. Goodrich.

MR. E. R. PHILO, Elmira, N. Y.

South Britain, Conn., April 19, 1909.

Dear Sir:—I have followed your System as close as I could; the result is a complete success. If there can be any improvement on nature, your brooder is it. The first experience I had with your System was last December. I hatched 17 chicks under two hens, put them as soon as hatched in one of your brooders out of doors, and at the age of three months I sold them at 35c. a pound. They then averaged 2½ lbs. each, and the man I sold them to said they were the finest he ever saw, and he wants all I can spare this season.

Yours truly, A. E. Nelson.



Photograph Showing a Portion of the Philo National Poultry Institute Poultry Plant, Where There Are Now Over 5,000 Pedigreed White Orpingtons on Less Than a Half Acre of Land.

SPECIAL OFFER

Send \$1.00 for one year's subscription to the *Poultry Review*, a monthly magazine devoted to progressive methods of poultry keeping, and we will include, without charge, a copy of the latest revised edition of the *Philo System Book*.

E. R. PHILO, Publisher
2633 Lake St., Elmira, N. Y.

WALTHAM WATCHES ON CREDIT



No 43

BIG BARGAINS. Diamond Rings, any style mounting. Terms: \$3.75 per Month.

For Holiday Gifts—Big Specials

FULL JEWEL WALTHAM \$10.65

In Fine 20-Year Gold-filled Case. Guaranteed to keep Accurate Time
SENT ON FREE TRIAL, ALL CHARGES PREPAID.

You do not pay one penny until you have seen and examined this High-Grade, Full Jeweled Waltham Watch, with Patent Hairspring, in any style plain or engraved Case, right in your own hands.

Greatest Bargain Ever offered \$1 a Month.

No matter how far away you live, or how small your salary or income we will trust you for a high-grade adjusted Waltham Watch, in gold case, warranted for 25 years, and guaranteed to pass any railroad inspection.

Write for our handsome Holiday Catalog, filled with beautiful photographic illustrations of Diamonds, Watches, solid gold Jewelry, Silverware and choice Novelties for Christmas presents. Select any article you would like to own or present to a loved one; it will be sent on approval.



LOFTIS
BROS & CO. 1859

THE OLD RELIABLE ORIGINAL DIAMOND AND WATCH CREDIT HOUSE

Dept. A 661 92 to 98 STATE ST., CHICAGO, ILL.
Branches: Pittsburg, Pa., St. Louis, Mo.



Mayler's

COCOA AND CHOCOLATES ARE STILL THE BEST SOLD BY GROCERS EVERYWHERE



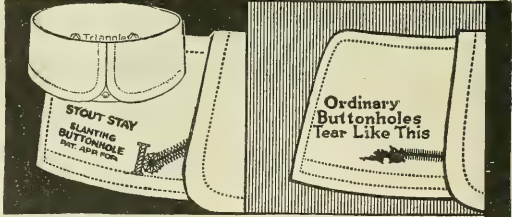
MORE MONEY

is being made by those who invest in town lots at the beginning of Western Canada's future industrial and commercial centers, than in any other way. It is estimated that

ONE HUNDRED MILLION DOLLARS was made in the year ending July 1, 1910, by those who had the foresight and courage to make such investments.

IT IS ALL GOOD, CLEAN MONEY, TOO You can invest as little as \$10 a month and get your share of it. Let us tell you about Fort George, the last great metropolis of North America, and other opportunities for investment in lands, business openings, etc., in British Columbia.

COMMERCIAL CLUB OF FORT GEORGE
PUBLICITY BUREAU, 613-S BOWER BLDG., VANCOUVER, B.C.



Triangle 5-PLY Collars

Showing the Stout Stay and Slanting Buttonhole of Triangle 5-Ply Collars. The Slanting Buttonhole holds the points together firmly and the Stout Stay prevents the buttonhole from wearing or tearing out.

Triangle 5-Ply Collars do not come back from the laundry with the broken buttonholes and gaping fronts of ordinary collars.

These points in addition to the 5-Ply features, enable Triangle Collars to hold their style to the end of a much longer life.

The Pager is a new style 2 1/4 inches high.

Same price as any 2 for 25c collar. If your dealer doesn't keep them, send us his name and 50c for 4. In Canada 3 for 50c. Write us for "Key to Correct Dress" and sample buttonhole, showing Stout Stay.

VAN ZANDT, JACOBS & CO. 618 River Street, Troy, N. Y.

"The Collars of Quality"



WHITE VALLEY GEMS IMPORTED from FRANCE
SEE THEM BEFORE PAYING!

These Gems are chemical white sapphires. Can't be told from diamonds except by an expert. Stand acid and fire diamond tests. So hard they can't be filed and will cut glass. Brilliance guaranteed 25 years. All mounted in 14K solid gold diamond mountings. Will send you any style ring, pin or stud on approval—all charges prepaid—no money in advance. Write for Free Illustrated booklet, special prices and ring measure.
WHITE VALLEY GEM CO., 704 Saks Bldg., Indianapolis, Ind



Everybody's Chewin'

Colgan's "Chips"



"The gum that's round"

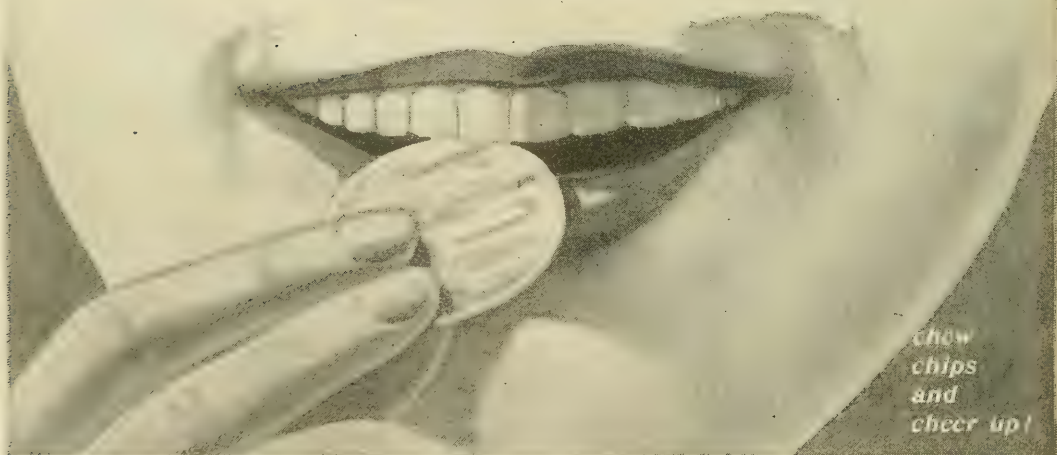
Sure thing—just must—can't help it! "Violet Chips" and "Mint Chips"—the cheer-up, happy-days kind of chewing gum that jollies digestive machinery, injects vigor into your spirits, tones up your breath—sets you plumb-right to rub up against this old world's rough spots!

Just Ask for Colgan's Chips Mint or Violet

10 chips in a sanitary metal box, 5c. Choice of wisefolks—particularly sportsmen. Sold everywhere, or we'll send a full-sized box of each for 10c.

Ball player's picture in every package

COLGAN GUM CO., Inc., Louisville, Ky.



*Chew
chips
and
cheer up!*

CRYSTAL *Domino* SUGAR

2 lb and 5 lb Boxes! • Best Sugar for Tea and Coffee! • By Grocers Everywhere!



This year make your Christmas Instrument an EDISON PHONOGRAPH

Make it an EDISON because—

1st—The Edison Phonograph has just the right volume of sound for the home. It is not loud enough to be heard next door or loud enough to echo to the farthest corner of the dealer's salesroom, but in your home its sweet, modulated tones will entertain you and your family in a way that never grows tiresome.

2d—The Edison Phonograph has a Sapphire Reproducing Point that does not scratch, does not wear out and never needs changing, and which travels in the grooves of the sensitive Edison cylinder Records, bringing out the sweet tone for which the Edison is famous.

3d—The Edison is the instrument that plays Amberol Records—records playing twice as long as ordinary records and giving you all of all the world's best music.

4th—The Edison Phonograph permits of home record making—a most fascinating form of entertainment. It will record what you or your friends say, sing or play and then instantly reproduce it as clearly and accurately as it reproduces the Records of Edison artists.

These are a few of the Edison advantages. You want them in the instrument you buy. So go to a dealer's—there are Edison dealers everywhere—and insist on hearing an Edison—the instrument that has been perfected and is manufactured by Thomas A. Edison.

Edison Standard Records..... \$.35
Edison Amberol Records
(play twice as long)..... .50
Edison Grand Opera Records..... \$.75 to 2.00

There is an Edison Phonograph at a price to suit everybody's means, from the Gem at \$15.00 to the Amberola at \$200.00. Ask your dealer for complete catalogs of Edison Phonographs and Records, or write us.

NATIONAL PHONOGRAPH COMPANY, 92 LAKESIDE AVENUE, ORANGE, N. J.

With the Edison Business Phonograph you don't hold up any one else's work while your dictation is going on.

The Christmas MUNSEY



Women Who Have Upset Thrones

Unhappy monarchs whose empires have crumbled at woman's touch, from the days of Mark Antony to King Manuel of Portugal.

Insomnia and Insomniacs

By Dr. Woods Hutchinson

A commonsense talk about a widely prevalent but easily avoided disease.

Loeb, the Man at the Gate

By Herbert N. Casson

What honesty in the customs service has meant to the coffers of Uncle Sam.

The New Apportionment of the House

The difficult task of readjusting the membership of Congress according to the recent census, and the many political bearings of the problem.

The Story of the Trained Nurse

A history of the profession that has made possible the modern hospital and revolutionized the care of the sick.

Twelve Short Stories

: : :

One Serial

Seven Special Articles

*For Sale on All News-stands at 10 Cents a Copy
or Sent Direct by the Publishers*

THE FRANK A. MUNSEY COMPANY, 175 FIFTH AVE., NEW YORK

WANTED AGENTS - SALESMEN MANAGERS WANTED

STARTLING OPPORTUNITY TO MAKE MONEY FAST. AT HOME OR TRAVELING—ALL OR SPARE TIME

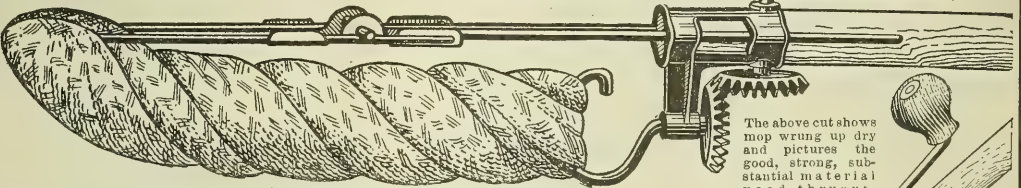
Experience not necessary. Honesty and willingness to work all we ask. We will give you an appointment worth \$50 to \$75 every week. You can be independent. Always have money in abundance and pleasant position selling greatest labor saving household invention brought forth in fifty years. **LISTEN:**—One man's orders \$2,650.00 one month, profit \$1,650.00. Sylvester Baker, of Pa., a boy of 14, made \$9.00 in 2½ hours. C. C. Tanner, Ia., 80 years old, averages five sales to seven calls. See what a wonderful opportunity! **Room for YOU**, no matter what your age or experience, or where you are located—if you are square and will act quick. But don't delay—territory is going fast. Read what others are doing and be influenced by their success. **WORK FOR US AND GET RICH.**

"I do not see how a better seller could be manufactured," writes Parker J. Townsend, Minn. "Called at twenty homes, made nineteen sales." —E. A. Martin, Mich. "Most simple, practical, necessary household article I have ever seen," says E. W. Melvin, San Francisco. "Took six dozen orders in four days." —W. R. Hill, Ill. "Went out first morning, took sixteen orders." —N. H. Torrence, New York. "Started out 10 a. m., sold thirty-five by 4 o'clock." —J. R. Thomas, Colo. "Sold 131 in two days." —G. W. Handy, New York. "I have sold goods for years, but frankly, I have never had a seller like this." —W. P. Spangenberg, N. J. "Canvassed eleven families, took eleven orders." —E. Randall, Minn. "**SOLD EIGHTEEN FIRST 4½ HOURS.** Will start one man working for me today, another Saturday." —Elmer Menn, Wis. These words are real—they are honest. **YOU CAN MAKE THIS MONEY:** You can make

\$3000.00 in 3 Months

THE NEW EASY WRINGER MOP

**TURN
CRANK
TO
WRING**

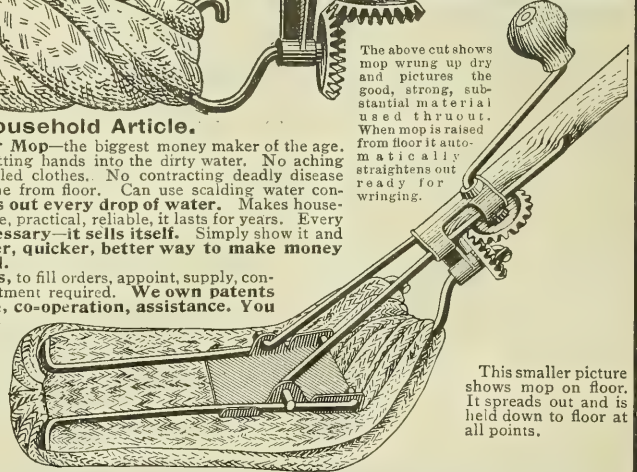


New Low Priced Household Article.

selling this great invention—**The Easy-Wringer Mop**—the biggest money maker of the age. Think of it! **A Self-Wringing Mop.** No putting hands into the dirty water. No aching backs. No slopping against woodwork. No soiled clothes. No contracting deadly disease from touching hands to filth and germs that come from floor. Can use scalding water containing strong lye. **Two turns of crank wrings out every drop of water.** Makes house-keeping a pleasure—Makes the day happy. Simple, practical, reliable, it lasts for years. Every woman is interested—and buys. **No talking necessary—it sells itself.** Simply show it and take the order. **Could you imagine an easier, quicker, better way to make money than supplying this demand already created.**

We want more agents, salesmen, managers, to fill orders, appoint, supply, control sub-agents, **150 per cent profit.** No investment required. **We own patents and give you exclusive territory, protection, co-operation, assistance.** You **can't fail, because you risk nothing. HUNDREDS ARE GETTING RICH.** Act quick. Write for your county today. **WE WANT A THOUSAND MEN AND WOMEN.**

Send no Money: Only your name and address on a postal card for information, offer and valuable booklet **FREE.** Tomorrow belongs to this one behind—the opportunity is open **TODAY.** Write your name and address clearly, giving name of county.



This smaller picture shows mop on floor. It spreads out and is held down to floor at all points.

The U. S. Mop Company, 1199 Main St., Leipsic, Ohio.

The Story of an Extraordinary Advertising Service

is the name of an interesting booklet we would like to send to every manufacturer and every business man who is not now taking advantage of the best selling force in the advertising field to-day.

We can suggest a solution of the problem of national distribution, with the jobber, the retailer, or the consumer; we can help the manufacturer to develop his business along entirely new lines.

A postal brings full details of this service. Write to-day, and tell us what we can do for you.

THE FRANK A. MUNSEY COMPANY

175 Fifth Avenue, New York

MARK ENDERBY: ENGINEER

By Robert Fulkerson Hoffman

EVERY one of you railroad men—and your wives and mothers, too—should read this story of mountain railroading in the Southwest because its characters are the kind of people you work with every day, and the scenes and events described are familiar to you all.

The Rock Island Employés Magazine says:

"It's a book that a man with the vim of the road in his blood will simply have to read if he once gets his eye on it. One of the best things about it, is the fact that it is not one of those long-winded novels that a man, as busy as a railroad man, can only read in unsatisfactory snatches. Rather, every chapter is a powerful story in itself. Just the thing for a clerk to tuck away in his desk till the latter end of noon hour; a book that a trainman might put in his locker to read when he has to lay over sometime; just the sort for an engineer to slip into his cab seat to read when he has to hang around at some little place on the line."

Get the book today—you will read it over and over again, and like it better each time.

Illustrated in color by William
Harnden Foster. \$1.50

At all bookstores or by mail from the publishers

A. C. McCLURG & CO.

New York CHICAGO San Francisco

IT WOULD COST more than \$17,000 to send a post-card to the 1,700,000 and more homes that read "The Munsey Magazines" every month.

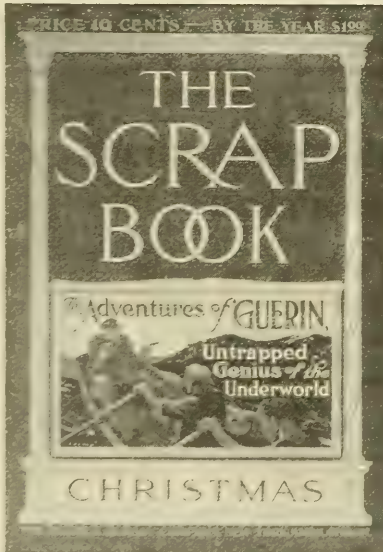
Advertisers who *know* are using this short-cut

Classified Advertising

	Rate per Line	
Munsey's Magazine	\$2.50	
The Scrap Book		
The Argosy	\$1.50	
The All-Story Magazine	1.00	
The Railroad Man's Magazine	.75	
The Cavalier	.50	
	\$6.25	
		Special Combination Rate \$5.50

Minimum 4 lines; Maximum 12 lines. Ten per cent discount for six consecutive insertions.

The Frank A. Munsey Company
175 Fifth Avenue, New York



UNTIL you have read THE SCRAP BOOK you cannot fully appreciate how engrossing, how interesting a publication of this kind can be made.

At ten cents a copy it provides a fund of entertainment month by month that can hardly be duplicated short of a shelf-full of miscellanies.

ALL NEWSDEALERS



This (greatly reduced) shows a portion of our famous "Prairie Girl" picture. This handsome portrait is reproduced in 12 colors exactly like the original and is printed without advertising, on fine plate paper ready for framing or hanging. Equal to pictures costing \$1.50 or more at art stores.

This beautiful picture will be sent to you postpaid upon receipt of ten cents in stamps or coin and with it we will include free, our big illustrated catalog showing the most complete line of revolvers, rifles and shotguns made.

THE HOPKINS & ALLEN ARMS CO.
58 Chestnut Street
Norwich, Conn.

\$13,245 IN 110 DAYS
\$30,000 in 9 Months

Amount of orders from R. V. Zimmerman, Ind., farmer (address upon request), for our

NEW INVENTION

First experience as an agent. M. Stoneman, Nebr., artist (address upon request), spare time orders total

OVER \$15,000.00

One order exceeds \$6,000. "Best thing ever sold." Not one complaint from 2,000 customers." C. A. Korstad, Minn. (address upon request),

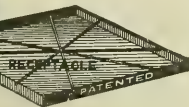
Orders \$2,212 Worth in Two Weeks

Hundreds enjoying similar prosperity. Agents breaking all records—actually getting rich. Let us refer you to 10 more whose total orders exceed \$51,000; to hundreds like O. Schleicher,

Ohio (minister), whose first 12 hours work sold 30 outfits (profit \$81.90). A. Wilson, Ky., who ordered \$4,000 worth and sold 102 in 14 days (profit \$278.40). J. Hart, Texas, \$5,000



Sectional View



worth and sold 16 in 3 hours (profit \$43.68). Reese, Pa. (carpenter), solicited 60 people—sold 55. Reader, these results possible for you, at home or travelling, as exclusive agent for Allen's Wonderful Bath Apparatus. New, powerful, irresistible. Truly wonderful! Gives every home a modern bathroom for only \$6.50. Abolishes tubs, bowls, buckets, wash rags, sponges. Supplies hot or cold water in any room. No plumbing, no water works, self-heating, makes bathing 5 minute operation. Easily carried from room to room. Child operates easily. Means no more cold rooms, drudgery, lugging water, filling tubs, emptying, cleaning, putting away. No wonder agents without previous experience make small fortunes, buy homes, have an automobile, bank account. Average 8 orders to every 10 families. Fascinating, dignified, exciting work. To active agents. Don't hesitate—business supplies capital. Investigate by all means. Address postal today for full details—decide afterwards.

Free Sample, Credit, Liberal Terms to active agents. **Allen Mfg. Co., 3161 Allen Bldg., Toledo, O.**



R. V. Zimmerman

This Edison Fireside Model Phonograph Shipped FREE!

Read This Great NEW Offer



Shipped FREE!

The latest and greatest offer on the Genuine Edison. This offer is for every one who has not yet heard our Edison in his own home—for you to hear concerts and entertainments by the world-famous musicians—just such entertainments as the metropolitan theaters are producing.

MY OFFER

I will send you this Genuine Edison Fireside Outfit (newest model) complete with 1 dozen Edison Gold Moulded and Amberol Records, for an absolutely Free Loan. I don't ask any money down or in advance. There are no C. O. D. shipments; no leases or mortgages—absolutely nothing but a plain out-and-out offer to ship you this phonograph together with a dozen records of your own selection on a free trial so that you can hear it and play it in your own home.

Why I Want to Lend You This Phonograph I know that there are thousands of people who have never heard the Genuine Edison Phonograph. Now, there's only one way to convince people that the Edison is superior, and that is to let them actually see and hear this remarkable instrument for themselves. **That is why I am making this offer.** The only way to make you actually realize these things for yourself is to loan you a Genuine Edison Phonograph free and let you try it.

All You Need Do

All I ask you to do is to invite as many as possible of your friends to hear this wonderful Fireside Edison. I feel absolutely certain that out of the number of your friends who will hear your machine there will be at least one and probably more who will want an Edison of his own. If there isn't (and this sometimes happens) I won't blame you in the least. You won't be asked to act as our agent or even assist in the sale of a single instrument.

If You Want to Keep the Phonograph

that is if you wish to make the phonograph your own, you may do so. Either remit us the price in full, or if you prefer, we will allow you to pay for it on the easiest kind of payments.

Our Easy Payment Plan

Two dollars a month pays for an outfit. There is absolutely no lease or mortgage of any kind, no guarantee from a third party, no going before a notary, no publicity of any kind, and the payments are so very small, and our terms so liberal you never notice the payments.

FREE

Just sign this coupon now and mail it to us. I will send you our Edison Phonograph Catalog, the very latest list of Edison Gold Moulded and Amberol Records (1500 of them) and our Free Trial Certificate entitling you to this grand offer. Sign this coupon or send postal or letter now. No obligations—get catalog.

F. K. BABSON, Edison Phonograph Distributors, Edison Block, Dept. 1101 Chicago, Ill.

Western Office, 65 Post Street, San Francisco, Cal.
Canadian Office, 355 Portage Ave., Winnipeg, Canada.

F. K. BABSON EDISON PHONOGRAPH DISTRIBUTORS Dept. 1101

Edison Block, Chicago, Ill. Please send me, without any obligations, your New Edison Phonograph Catalog, list of Edison Gold Moulded and Amberol Records and Free Trial Certificate entitling me to your grand offer, all free.

Name

Address

Children Are Blessed With a Sweet Tooth

So are you—and you should encourage it, for the system demands *sugar* more than *meats*. Of the three nutritive elements which support life—sugar, protein and fat—*sugar* is the most important. You can't eat too much of it in its *correct* form.

It is the *native sugar* in good *ribbon cane syrup* that gives it its wonderful food value—the *whole* substance is *wholesome sugar*.

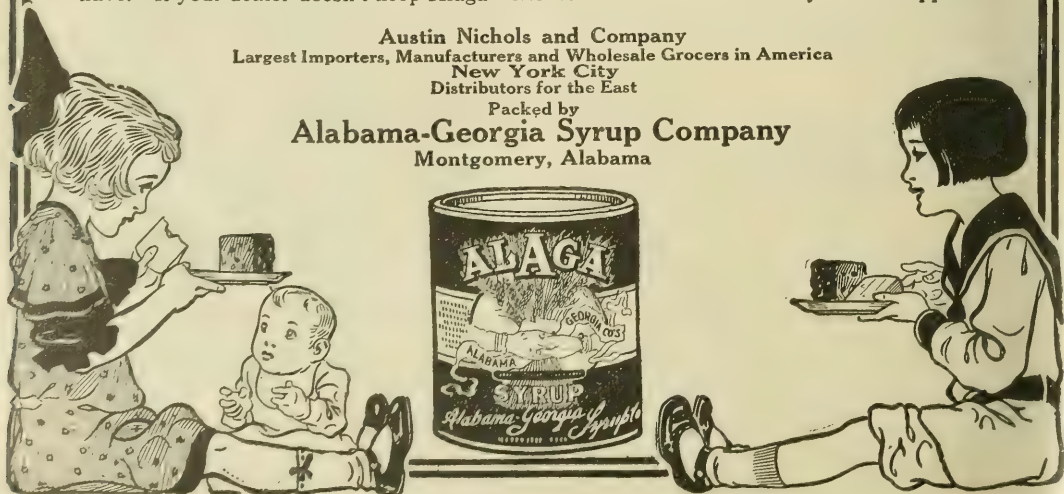
The "sweetness" of many syrups sold to the public is a little sugar or saccharine matter *added* to an insipid by-product "filler"—*tasteless* until the sugar is added. Such syrup, by itself, or made into cake and candy, has about as much food value as *shavings*.

ALAGA SYRUP

is the finest example of a succulent Georgia *ribbon cane* syrup, made by the old plantation "open kettle" process, put into cans direct from the evaporator *while hot*—thus insuring the permanency of its *natural* sweet flavor and inimitable taste. It's the good *old-fashioned* taste you remember in your grandmother's pantry—the most welcome food children can have. If your dealer doesn't keep *Alaga* write us and we will see that you are supplied.

Austin Nichols and Company
Largest Importers, Manufacturers and Wholesale Grocers in America
New York City
Distributors for the East

Packed by
Alabama-Georgia Syrup Company
Montgomery, Alabama



BUSTER BROWN'S

GUARANTEED STOCKINGS



FOR MEN WOMEN AND CHILDREN

Trade Mark Registered

DARN! Why Darn?

YOU HAVE BEEN DARNING ALL YOUR LIFE. IF YOU WANT TO QUIT DARNING BUY BUSTER BROWN'S GUARANTEED DARNLESS STOCKINGS FOR THE WHOLE FAMILY.

Silk Lisle Half Hose for MEN; black, tan, navy, gray, wine, purple and heliotrope.

Lisle Hose for LADIES; medium and gauze weight; black or tan.

Combed Egyptian Hose for BOYS; light and heavy weight; black or tan.

Lisle Fine Gauge Ribbed Hose for MISSES; medium and light weight, black or tan.

MISSES Silk Lisle Fine Gauge, Ribbed, black or tan.

25c a Pair. Four Pairs to the Box, \$1.00

LADIES' Silk Lisle Gauze, black or tan; three pairs to box, \$1.00.

GUARANTEED FOR FOUR MONTHS

For sale MOST everywhere, but if your merchant can't supply you send us your order, stating kind, size and color wanted, and we will supply you direct, prepaying postage.

Write for Buster's Latest Funny Book, FREE.

Buster Brown's Hosiery Mills,

570 Sherman Ave., Chattanooga, Tenn.



"DON'T SHOUT"



"I hear you. I can hear now as well as anybody. 'How?' Oh, something new—THE MORLEY PHONE. I've a pair in my ears now, but they are invisible. I would not know I had them in, myself, only that I hear all right."

The Morley Phone for the

DEAF

makes low sounds and whispers plainly heard. Invisible, comfortable, weightless and harmless. Anyone can adjust

it. Over one hundred thousand sold. Write for booklet and testimonials. THE MORLEY CO., Dept. 721, Perry Bldg., Phila.

SCOTCH CALABASH PIPES

Make ideal Xmas presents for your friends. Scotch Calabash Pipes ensure a cool, sweet smoke by absorbing all nicotine. Money back if not satisfactory.

THE ROYAL PIPE CO.
216 Broad Street Nashville, Tenn.



Stamps Taken

50c each or 3 for \$1 delivered free



RAJAH DIAMONDS

MINED FROM THE EARTH

"THEY Baffle DETECTION"
Mounted in Solid Gold Rings—Any Style

All the sparkle, beauty and brilliancy of the genuine, at 1-20 the cost. Stand acid, fire, alkali and filing tests, and expert examination. Guaranteed 25 years. SENT C. O. D. for examination. CHARGES PREPAID. Write for free illustrated catalogue. Special price list, and ring measure.

THE RAJAH MINES CO.
222 Bowles Bldg. Detroit, Mich.

Fighting the Trust!!

The Smashing Anti-Trust Fight Now On!



Trust Prices Eclipsed at Last!

An absolutely first-class high-grade watch at a price within the reach of the people—The Burlington Special Anti-Trust Watch.

The World's Masterpiece of watch manufacture—the Burlington Special—now sold direct to the public at its rock-bottom, anti-trust price (and besides without middlemen's profits).

We do not care what it costs—we will uphold our independent line and so we are making the most sweeping, baffling offer ever made on watches.

Some trusts are legal and some are not. We do not say that the watch trust is illegal; but we do say that the methods of the giant factories in making "contracts" with dealers to uphold double prices on watches is very unfair—unfair to us and unfair to you. Hence our direct offer on the Burlington at the very same price the Wholesale Jeweler must pay.

This is your opportunity—NOW—while this great Anti-trust offer lasts—get the best watch made anywhere at one-third the price of other high-grade watches. Furthermore, in order to fight the Trust most effectually, we even allow terms of \$2.50 a month on our finest watch—easiest possible payments at the rock-bottom price, the identical price the Wholesale jeweler must pay.

Watch Book on request

Now do not miss this opportunity. At least we want you to know about WATCHES and WATCH PRICES. Write Today.

Be posted

Send a postal or letter or simply mail coupon without sending a letter and get the free book.

BURLINGTON WATCH CO.

Dept. 1101

19th and Marshall Blvd. CHICAGO

18th and Marshall Blvd. CHICAGO

Burlington Watch Co., Dept. 1101

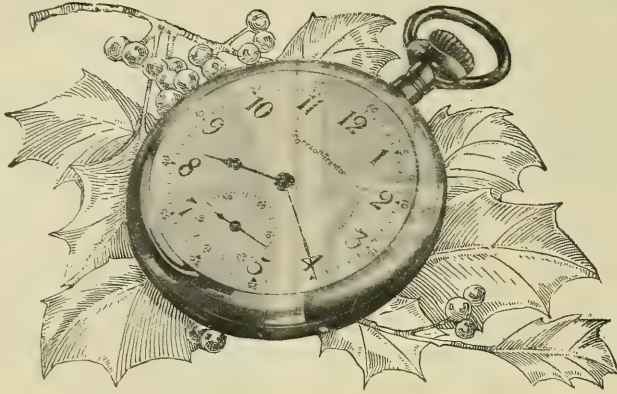
Please send me without obligation and prepay your free book on watches and copy of your \$1,000.00 challenge with full explanations of your cash or \$2.50 a month offer on the Burlington Watch.

Name.....

Address.....

No letter Necessary

Coupon will do



For a Man's Christmas

Is there anything that so delights a man's heart as a fine watch—one that permits him to speak the time with authority? It is refined and beautiful, as a gift should be, and besides is his most personal and useful possession. For years he carries it wherever he goes.

But his satisfaction depends upon its being an exact timer. Among watches there is one, though *moderate* priced, which has come to be conspicuous for its *close timing*—accurate as only high-priced watches have been.

A Superior Watch

Ingersoll-Trenton

7 and 15 Jewel Models

\$5 to \$15

No handsomer watch has ever been made. It will keep time for a generation. Your home jeweler can sell you an Ingersoll-Trenton and he will stand behind it. It is sold at our advertised prices by all who handle it and our price ticket is on each watch.

The I-T is sold exclusively by *responsible retail jewelers*, because fine watches should not be bought by mail nor from those who do not understand them and their adjustments. Over 9,000 good jewelers now handle it.

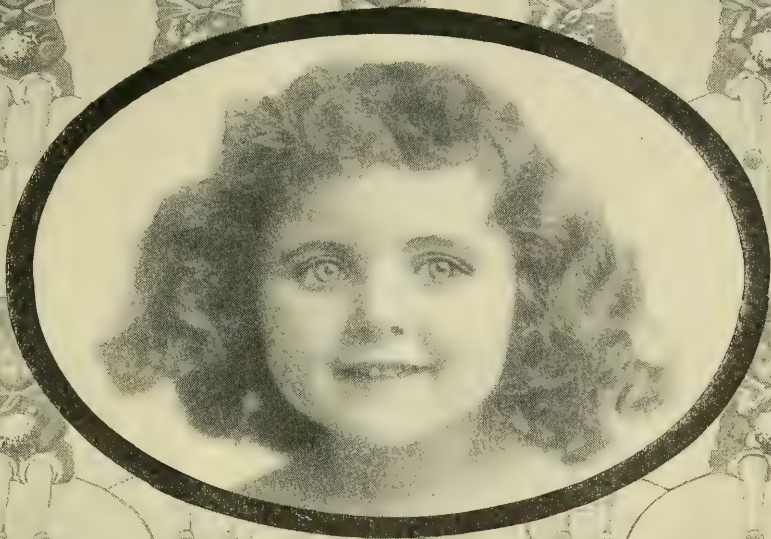
Go to your own jeweler's and examine it before buying any watch. If, by chance, he hasn't the I-T, we will gladly send the name of one nearby who has. Our booklet, "How to Judge a Watch," is the best explanation of a watch ever written, and is free on request. The \$5 Ingersoll-Trenton has 7 genuine jewels and is in a solid nickel case.

The \$15 Ingersoll-Trenton has 15 jewels and is in an I-T 25 year guaranteed gold-filled case of the highest quality.

Equally accurate models in a variety of I-T cases at \$7, \$8, \$9, \$10 and \$12.

Robt. H. Ingersoll & Bro.

62 Frankel Bldg., New York



A Fairy Complexion

Fairy Soap not only agrees with the tenderest skin, but improves any complexion. It is made from edible products — the kind seldom used in soaps. It is white — *undyed* — because it has no impurities or cheap ingredients to hide under the mask of coloring matter. Fairy Soap not only cleans, but *cleanses*.

The handy, floating, oval cake — price but 5c.

THE N. K. FAIRBANK COMPANY
CHICAGO

**"Have You
a little 'Fairy' in Your Home?"**



Sixteenth Year



"Here's to
another year
—and years
and years of
Steady Nerves
Clear Brains
and Vigorous
Health"

Every year more people quit coffee and use

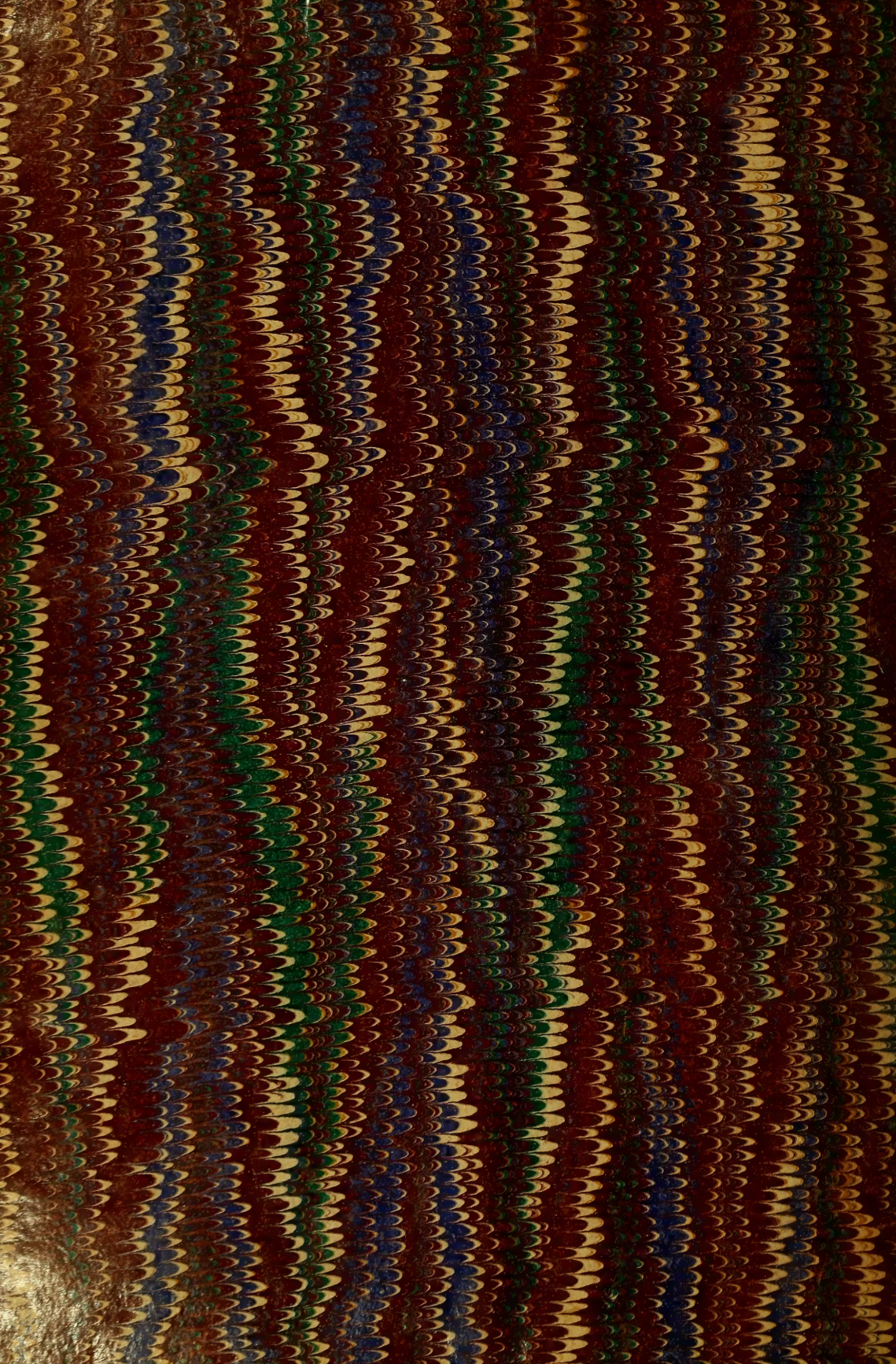
1895 **POSTUM** 1911

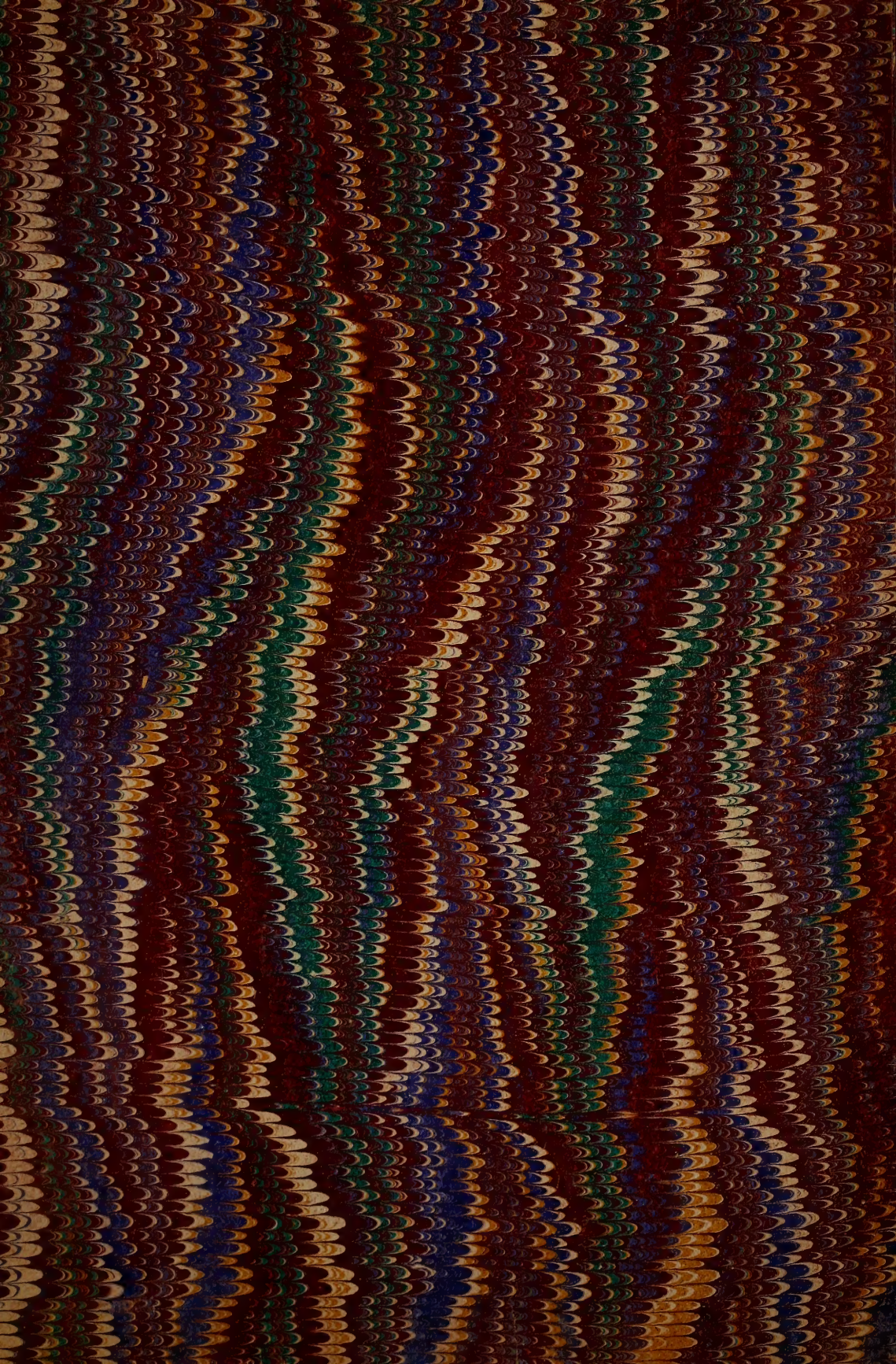
"There's a Reason"

Postum Cereal Co., Ltd., Battle Creek, Mich., U.S.A.









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